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ABSTRACT

Reports on current research on the educational, social, and financial implications of declining enrollment in Ontario are summarized in part 1 of this paper and accompanied by the author's comments and conclusions. The abstracts cover such topics as school closure, the adequacy of small secondary schools, minimum acceptable size of elementary schools, relationship of per pupil costs to size in elementary schools, and use of vacant school space. Part 2 of the paper provides evaluative abstracts of reports on the costs of education in Ontario, including the areas of teacher education, school construction, pupil transportation, planning, teachers' salaries, and sources of educational finance. An extensive annotated bibliography is included as part 3 of the paper. (WD)

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INFORMATION BULLETIN NO. 5

ABSTRACTS OF REPORTS ON COSTS OF EDUCATION, FINANCIAL ASPECTS OF DECLINING ENROLMENT AND OF CURRENT RESEARCH INTO PROBLEMS OF DECLINING ENROLMENT

E BROCK RIDEOUT

Department of Educational Administration
The Ontario Institute for Studies in Education

APRIL, 1978

COMMISSION ON DECLINING SCHOOL ENROLMENTS IN ONTARIO (CODE)

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REPORT #I Abstract and Comment on Reports on Current Research into Declining Enrolment

Part 1 Meeting Problems of Declining Enrolment

by E. Brock Rideout

Abstract, with Comments Thereon, of the Report Entitled: "Meeting Problems of Declining Enrolment."*

This was the final report of the first year of the contract research project: "Educational, Social, and Financial Implications to School Boards of Declining Enrolment." It reports on the only completed part of the project at that time: chiefly a series of case studies carried out to investigate the attempts of school boards to close schools. Nine such cases are reported in the publication. It was felt that such case studies would "cut across the three facets of the problem: educational, social, and financial...and enable the Ministry to draw some inferences, particularly concerning the interplay of educational, social, and financial factors in controversies over the proposed closure of schools."

Chapter 1 of the report deals with the background to the study. Ontario public and separate elementary enrolments from 1970 through 1973 are reported. The masking effect of increased kindergarten and junior kindergarten provision is mentioned, as is regional variation. Reference is made to the fact that administrative expertise will be much more important during the period of decline than it was earlier; and this is made difficult by the fact that the current managers of the system have gained practically all of their experience during an era of expansion. It is noted that the problems of coping with decline are made less serious in Ontario because consolidation of school boards has already been accomplished; in larger administrative units there is a much wider range of options for adjusting to decline than is the case in small units.

The nine case studies of attempted closure of a school are presented in Chapter 2. The cases break down as follows:

1. Location: 2 schools each from North York and Peterborough Co. Boards of Education, and one school each from the Peel County, Lincoln South, Etobicoke, Toronto, and Hamilton Boards of Education.

2. Type:

Secondary Schools:	2
Senior Public Schools:	1
Junior Public Schools (K-6):	3
Junior Public Schools (JK-6):	1
Junior Public Schools (K-5):	1
Junior Public Schools (2-5):	1
	9

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*Rideout, E. Brock, et al., Meeting Problems of Declining Enrolment, p. 5.

3. Solution attempted:

To close school --7
To convert to another type of school --1
To trade school for one under jurisdiction of another Board --1
9

4. Solutions achieved:

School closed --5
School kept open --2
School not converted --1
School not traded (another school closed) --1
9

5. Reasons for attempts to close:

Cost saving --6
Improved program --4
Low morale --1
19th century school --1
Decline in all of several neighbourhood schools --4
Approval for needed new building elsewhere held up because of vacant space --1
17 (more than one reason given in most cases)

6. Reasons for opposition to closing:

Traffic dangers --7
Opposition to busing --3
Loss of community centre --3
Small school seen as advantage --3
Psychic damage to children in changing schools --2
Fear of undesirable use of closed school --1
Loss of use of playground --1
20

Chapter 3 of the report is entitled: "To Close or Not to Close? -- Suggested Guidelines." It attempts to combine the findings of the nine case studies with information gleaned from board policies and from other studies relating to declining enrolment. The headings and sub-heads under which the suggested guidelines are presented are as follows:

A. Planning

  1. Enrolment data
  2. Cost data on a school-by-school basis
  3. Staffing data by school
  4. Program offerings by school
  5. Policies of coterminous and neighbouring boards

B. Existing Board Policies

  1. Transportation
  2. Boundaries of school attendance areas
  3. Staffing ratios
  4. Program requirements and standards
  5. Facilities and space utilization

C. Policy for Situation of Declining Enrolment

  1. Minimum effective size of school
  2. Advisory Committee to examine alternatives when closure seems indicated. (Trustees, administrators, staff members, parents, and others).
  3. Appeals procedures

D. Review Procedures

  1. Identify school areas needing review
  2. Conduct the review
     a. establish schedule of activities
     b. notify the community
     c. board and advisory committee assimilate the data
     d. community survey and/or solicitation of briefs (optional)
  3. Develop options
     a. supplement programs in schools not meeting standards set out in B.4 & 5 above
     b. establish multi-grade classes
     c. pair schools
     d. adjust attendance area boundaries
     e. close one or more classrooms
     f. lease or rent vacant space

- g. share accommodation with another board
- h. close a school and transfer students and staff.

E. Closure Procedures

1. Establish advisory committee if not already established
2. Formulate plans re:
    - a. relocation of students
        - i. comparative costs
        - ii. standard of education in the new school(s)
        - iii. emotional and psychological stresses that a change may impose on pupils
        - iv. transportation (costs, alternative routes and methods)
    - b. transfer of staff
    - c. disposition of buildings and grounds
    - d. consultation with the community
        - i. call public meeting after adequate preparations made
        - ii. call further meetings, sometimes with small groups, as the need arises
3. Process of closing
    - a. gradual closing
    - b. closing ceremonies

F. Conclusion

The solution that is adopted, whether it be school closure or some alternative plan, may be termed successful if the following conditions assessment per weighted are met:

1. The community has accepted the solution as an improvement, educationally and socially, for the students and the neighbourhood.

2. The solution is beneficial to the school board in terms of educational program and cost.

3. The solution is compatible with Ministry policy and the needs of other boards in the area.

Chapter 4 of the report is a review of selected references related to declining enrolments. Topics covered are (1) enrolment trends; (2) school size; (3) costs; (4) administration in the context of enrolment decline; and (5) facilities.

General Comments on This Report

I believe the nine case studies will prove to be useful reading for trustees and board officials facing the possibility of school closures. They should enhance the awareness of pitfalls to be avoided and give indications of the conditions under which necessary closures can be carried out successfully. The case studies will, of course, also provide some ammunition for parents and other community leaders who, while opposed to a proposed closure, are unaware of how to go about fighting it. On the other hand, such persons will be in possession of some information as to when closure makes sense and will be enabled to make positive suggestions as to alternatives and as to community input into the closure/non-closure decision.

The guidelines developed from the cases and other sources should be useful, particularly to smaller boards.

One of the problems which prompted the Ministry to have this study done was the touchy one of selling or demolishing a public school when the separate school board has need of increased accommodation. The kinds of tensions that arise in this situation are, I think, evident from a reading of two of the case studies reported: Abbott Senior Public School, and Caldwell Public School. Though leasing, selling, or trading a public school for use as a separate school seems logical and is favoured by Ministry regulations, it did not happen in either of these cases. It might be enlightening to find out how many no-longer-needed public schools have in fact become separate schools in the province since 1971.

Although inadequacy of program is mentioned in most instances of attempted closure, one gets the impression that the strongest impetus was usually a financial one. This was particularly true of those closures that were proposed during 1971 to 1975 -- the period when expenditure ceilings were in effect. With the expenditure ceilings now removed, the financial pressures for closure will not be as great -- except in jurisdictions where assessment per weighted pupil is well below average.

The opposition to closure was almost always very localized and to me reflects two movements that have been strengthening during the seventies: (1) the growth of and power exercised by local community pressure groups, and (2) the emergence of the concept of the community use of schools. So strong has this latter movement become in some cities (cf. Toronto) that it has become impossible to close a school for any reason. If funds for education continue to be limited, we may be approaching the time when the "community school" aspects of elementary education should be financed out of the Parks and Recreation or other municipal budgets and not out of the limited school budgets. Quebec has adopted a policy with respect to what they call "the last school in the district" under which a district is allowed to keep its last school provided the residents of that district are willing to pay the additional costs of continuing to operate that school.

One situation in which it seems logical to close a school is that in which the local community is disappearing because of rezoning for commercial and/or industrial purposes or because of the creation or extension of an expressway or arterial roadway. It is unlikely in such cases that the building will be needed at a future date for school purposes even if enrolments begin to increase again.

One possible solution to the problem of coexisting surplus space in public elementary schools and the need for additional space in the separate schools could be to provide for some type of umbrella authority with real powers with respect to the allocation of school places in a group of public and separate school boards.

I believe that the financial, social, and educational implications (in that order) of declining enrolment are well demonstrated and encapsulated in situations where school closure becomes a debated option.

REPORT #I	Abstract and Comment on Reports on Current Research into Declining Enrolment
Part 2	Chapter 1 of "Educational, Social, and Financial Implications to School Boards of Declining Enrolment"

by E. Brock Rideout

Abstract with Commentary, of Chapter 1 of the Report: "Educational, Social, and Financial Implications to School Boards of Declining Enrolment"

Chapter 1 of the above-mentioned report is entitled, "Adequacy of Small Secondary Schools: A Review of Research Findings." It is subdivided into the following sections: Introduction; the Weaknesses of Small Secondary Schools; Hints for Operating Small Secondary Schools Effectively; Strengths of Small Secondary Schools; and Summary and Conclusions.

INTRODUCTION

A preliminary survey of 40 Ontario School Boards had indicated that the greatest educational concern with declining enrolments was the probability that schools would decline in enrolment to the point where they would no longer be able to provide quality education. If this fear is true there must be some minimum size of school below which a satisfactory education program cannot be offered. Chapter 2 reports on the result of an attempt to find out what that size is for an elementary school. But for secondary schools the wealth of research and opinion concerning small secondary schools influenced the researchers not to replicate their elementary school survey as to minimum satisfactory school size with secondary school teachers, principals and supervisory officers. Instead the literature on small secondary schools was reviewed. First, however, the report deals with the Ontario situation and the magnitude of the problem there. It is noted that an overall decrease in provincial secondary school enrolment had yet to appear (as of Sept. 1975). Percentage increases in enrolment had dropped gradually, annually, from 8.0% in 1968 to 0.5% in 1973. Then, anomalously had risen to 0.7% in 1974 and 2.6% in 1975. (In 1976, the increase was only 1.3%.)

It is stated that the problem will not be as serious in Ontario as in some other jurisdictions for two reasons: (1) the large units of administration for secondary schools and (2) the large size of the majority of secondary schools (54% at or above an enrolment of 1,000 in 1975). An expected drop in enrolment of 18-20% is predicted with some schools losing as much as 40% of their students.

For Ontario, small secondary schools are defined as those with fewer than 400 students (44 schools or 7.83% of the province's 3-5 year secondary schools), while very small schools are considered to be those with fewer than 200 students (10 schools - 1.78% of the total). It is pointed out that even if it were assumed that all schools declined by 50% there would be only 44 very small schools and 173 small schools in the province.

This, then, is absolute outside limit of the magnitude of the problem.

THE WEAKNESSES OF SMALL SECONDARY SCHOOLS

1. Finances
    a. Very small schools have higher per-pupil costs than do larger schools. (But so do very large schools - 2,000+ students.)

    b. Small schools are not as well equipped with libraries, laboratories, gymnasiums, office space, and cafeterias, as are larger schools.

    c. Funds not available for catering to the needs of students with special problems.

2. Curriculum
    a. Scope and depth of course offerings limited.

    b. Tend to be academically oriented.

    c. Absence of special programs for slow learners and gifted.

    d. Teachers tend to concentrate their efforts on pre-university students.

    e. Difficulties in changing courses and finding new ones to meet specific student and societal needs.

3. Student Achievement

Some studies show that students in very small schools perform less well academically than do those in larger schools. Other researchers have found that size of school makes little difference. Indeed, when other variables such as father's occupation, family attitudes, and socio-economic index are introduced, students from small schools often out-perform those at larger schools.

4. Staffing

    a. Difficulty in acquiring qualified teachers.

    b. High turnover.
    (Comment: Both of these problems will be minimal in a period of declining enrolment so long as there is a surplus of qualified teachers in the province.)

c. Professional contacts of teachers limited.

d. Teachers are apt to be asked to teach in a subject area in which they have little competence or experience.

e. Specialists will not be able to use their expertise as fully as in a larger school.

f. Teachers will have greater preparation loads as most courses will be taught only once a day.

5. Morale

a. The doctrine that "big is better" sometimes gives those at a small school the feeling that they are inferior.

b. Inter-school extra-curricular competition may suffer and contribute to low morale.

c. The closer community involvement with a small school can become too great and adversely affect the administration, teachers, and students.

d. The everyone-knows-everyone-else state of affairs makes it hard for teachers and students in small schools to achieve anonymity or to be by themselves. The frustration of these desires can lead to lowered morale.

6. Cultural Opportunities

Small schools are more apt to contain homogeneous groupings of students; this can lead to cultural impoverishment and the lack of the broadening of viewpoints that contact with significant others provides.

HINTS FOR OPERATING SMALL SECONDARY SCHOOLS MORE EFFECTIVELY

1. Finances

a. Additional funding for very small schools should be considered when the alternative to the small school is long distance (over one hour each way) busing or residential schools.

b. Costs can be reduced by sharing services and facilities with an elementary school or schools.

c. Direct appeals to parents and the community in general could be resorted to if sufficient money is not available for needed special equipment and facilities. Such a drive for funds will often strengthen the relationship between a school and its community.

   d. The Student's Council could be required to raise all or part of the funds needed for extra-curricular activities. This would not only release school budget monies for other purposes, but would also give student councils a raison d'etre.

2. Curriculum

   a. Use of the Linear Curriculum Expansion Project (LCEP) can dramatically increase course offerings in a small school.

   b. Use of correspondence courses should be encouraged both for students working by themselves and as part of time-tabled supervised student study.

   c. Use of modern technology including CAI.

   d. Use of multiple classes wherein a teacher teaches two or more grades of the same or similar subjects in the same time period.

   e. Use of paraprofessionals and teaching aids.

   f. Co-operative arrangement for giving students credit for work done with local businesses or services - (particularly applicable to non-academic courses).

   g. Average inter-school visits and taking small groups of students to special centres for intensive training for short periods of time.

3. Staffing

   a. Have well-qualified generalists rather than single-field specialists.

   b. Institution of a semester system will benefit many teachers.

   c. Different training needed for teachers working at small secondary schools.

   d. In-service training programs should be run on a regular basis.

4. Morale

   a. Select a principal with a strong positive attitude to the small school situation.

   b. Reduce or eliminate inter-school competition with large schools.

5. Cultural Activities

   a. Bring members of the community or visitors to the school.

   b. T.V. and other audio-visual media make cultural deficiencies of small schools potentially less serious than formerly.

STRENGTHS OF SMALL SECONDARY SCHOOLS

1. Administration

   a. Less bureaucracy and red tape.

   b. Administrator's job less onerous; more time for personal contact with staff and students.

   c. Fewer rules and written communications.

   d. Fewer problems with group co-operation which leads to greater confidence among teachers.

   e. A higher proportion of teachers become involved in the administration of the school.

2. The Teacher

   a. The presence of a strong human-relations dimension.

   b. Classes tend to be smaller; teachers get to know students better.

   c. Teachers are often able to teach in more than one subject area.

   d. Teachers derive greater formal fulfillment from the evidence that they are important in the running of the school.

   e. Teachers know one another better; it is therefore easier for them to discuss problems, co-ordinate activities, and meet socially as a community.

   f. It is easier to identify the ineffective teacher.

3. The Student

   a. Students in small high schools, on the average, participate in several times as many activities as do students in large schools.

   b. More juniors in small secondary schools have significantly more positions of responsibility than juniors in large schools.

   c. The level of satisfaction of juniors is much greater than that of students in large schools.

   d. Because of greater involvement in school life, students often have greater confidence and self-esteem.

   e. Students in small high schools exhibit greater responsibility for self-direction than do those in large schools.

4. The Community

   a. Parents of students in small high schools tend to be more aware of and involved in school life than are parents of students in large high schools.

   b. Teachers will get to know more parents and to know them better.

   c. In small schools less time is spent on buses. This helps to retain the sense of community.

5. Guidance

   a. Guidance becomes the responsibility of all staff members.

   b. Self-selection of guidance teachers by students improves the quality of guidance.

   c. Less student unrest.

6. Atmosphere

   a. Morale is often better in a small school. The greater human contact reduces the frustration of not being able to participate and be involved.

   b. Greater school loyalty and school spirit.

   c. Problem students less apt to be ignored.

d. Fewer and less serious discipline problems.

SUMMARY AND CONCLUSION

Except for a few boards and some individual schools, declining enrolments in secondary schools do not yet constitute a major problem in Ontario. Secondary-school-enrolment elasticity caused by varying participation rates among students beyond compulsory school age makes enrolment prediction more difficult at the secondary than at the elementary level. There is always the possibility that a larger percentage of the secondary-school age group will stay in school or return to school and mask a predicted decrease in secondary enrolment.

Even when declining enrolment does hit the secondary schools, the educational implications will probably not be very serious. Most Ontario secondary schools are large enough so that after the decline they will still be of satisfactory size. Some are so large that declines in enrolment could bring educational advantages rather than disadvantages. Only a very small percentage are so small that serious educational problems could result.

The social implications are harder to determine. The psychological shock to a community of learning that it is going "down hill" after a three-decade period in which growth meant progress and progress was good will be blunted because the realization will have already come and been assimilated at the elementary-school stage. If the research reviewed in this chapter is valid, there should be increased possibility for greater community involvement in secondary schools, both in program and in the use of vacant school space for community use. But this will not come about automatically because of decreased size alone. School boards and school staffs, as well as parents and community groups, will have to work to make it come about.

Finally, there are certainly cost implications in declining secondary school enrolments. Most of the research reviewed in this chapter indicates that pupil/teacher ratios were lower in smaller schools -- a fairly certain indication of higher costs per pupil. Even if the larger schools are able to maintain their pupil/teacher ratios in the face of declining enrolments, there are other factors that will increase cost per pupil, chief among which are the maintenance and operation of vacant space and of space used for community purposes.

Suggested actions for school boards in preparing for declining enrolments in secondary schools include the following:

1. Assess the possible uses for which vacant space in secondary schools might be used to:

    a. Upgrade the academic program;

    b. Enrich the academic and co-curricular programs;

    c. Accommodate activities of general community benefit;

    d. Accommodate activities of benefit to special sectors of the community;

    e. Accommodate offices of municipal, regional, or county government or agencies thereof;

    f. Provide space for certain tenants from the private sector.

2. Prepare contingency plans for the possible phasing out or consolidation of schools which might be expected to fall below some board-determined minimum enrolment such as 100 students or 30 students per grade.

3. Encourage staffs of schools with fewer than 700 students to investigate such things as:

    a. The Linear Curriculum Expansion Project (LCEP) and other semestering systems that can increase the range of curricular offerings in smaller high schools.

    b. The use of correspondence courses for certain small-enrolment options.

    c. The use of multiple classes in which two or more levels of the same or similar subjects are taught by a teacher in the same time period.

    d. Work-study programs with local enterprises.

    e. Inter-school visitation.

    f. Greater use of paraprofessionals.

    g. Taking small groups of students to special centres for intensive teaching for short periods of time.

    h. Cancellation of inter-school sports with large schools if such competition is resulting in lowered morale.

   i. Use of more members of the community or visitors to it with special skills and knowledge to enrich the cultural and social milieu of the school.

   j. Requiring most funding for co-curricular activities, including sports, to be provided by students' councils so as to build greater school morale and community involvement.

4. Consider the sharing of facilities and resources by elementary and secondary students.

5. Make certain that smaller schools are adequately equipped; investigate the use of educational T.V., programmed learning and CAI in such schools.

6. Reconsider staffing and salary policies for schools that are expected to be hardest hit by declining enrolment. This might include such things as:

   a. A bonus in the salary scale for teaching in small and/or isolated schools.

   b. On-going in-service training programs for teachers and administrators of small schools.

   c. A somewhat lower pupil/teacher ratio in smaller schools (already being done by some boards).

   d. A conscious policy of hiring well-qualified generalists who can teach in several curricular areas.

   e. Hiring principals and other staff who prefer to work in smaller schools.

7. Put pressure on the Ministry, universities, and others involved in teacher education to operate special courses designed for those who will teach in smaller schools.

CONCLUSIONS

This chapter has attempted to outline the main strengths and weaknesses of small high schools and has included some suggestions on how the weaknesses may be alleviated. It noted that small schools usually are much less bureaucratic and have a much stronger human-relations dimension than large schools. Inter-personal relationships between student and teacher, teacher and teacher, teacher and administrator, and school and community are generally more intense in small schools. This permits the individual to make a greater contribution and enhances his identity and self-esteem.

Greatest weaknesses are thought to be in the areas of finance and curricular offerings. While there are higher costs and fewer courses in the very small schools the differences between the small and medium-sized school are not great. Careful hiring and allocation of staff coupled with flexible scheduling of classes, the use of technology and correspondence courses can extend the range of course offerings. A strong positive attitude on the part of the principal and teachers will overcome feelings of inferiority and boost morale in small schools.

To decide whether a large or a small high school is better, one needs to keep in mind the frame of reference of the respondent. In many cases those who are involved in the school (i.e. teachers and students) prefer the more personalized atmosphere of the small school. Board members, parents and others who view the school from the outside tend to favour the large schools. Perhaps boards and schools faced with declining enrolments should take heart from this statement of August Gold (1975):

> Educational philosophy, land economics, cost benefit, environmental strategy and the social psychology of decentralism all reinforce an evolving conclusion: The small school is the educational shape of today.

COMMENTS

Most of this chapter of the report is a digest of research findings. The following points must be borne in mind when studying the digest.

1. The research reported on was published at various times in the period 1949-1975, although the great bulk of it dates from 1965-1975.

2. The research was conducted not only at different times but also in different jurisdiction in Canada and the United States.

3. The definition of small high school differed from study to study.

4. Some of the studies referred to small 12-grade schools rather than to small high schools as such.

It must be remembered that the research reported on in this study concerned the small secondary school *per se*, not a school that has become small through declining enrolment. As yet, it has been impossible to find enough such cases in a single state or province to warrant a study of the problems peculiar to that situation. Because the research deals with small schools it out of necessity has looked chiefly at rural schools since the overwhelming majority of small schools in all jurisdictions are in rural areas. This may mean that some of the strengths attributed to small schools may be functions of the rural locations of the schools rather than their size. Rural schools tend to be more homogeneous than do urban ones and the socio-economic status of the parents differs from that of parents in urban communities.

The research reported in this study does not speak at all to the question - What to do with surplus staff as schools decline? It does suggest that the professional staffing ratios (PSR)* will be somewhat higher in smaller schools and thus one cannot always expect a 10% reduction in staff for a 10% reduction in enrolment. This will, of course, have implications for unit cost.

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*Number of professionals per thousand students.

REPORT #I Abstract and Comment on Reports on Current Research into Declining Enrolment

Part 3 Abstract of and Commentary on Chapter 2 of the Publication "Educational, Social and Financial Implication to School Boards of Declining Enrolment."

by E. Brock Rideout

Abstract of and Commentary on Chapter 2 of the Publication "Educational, Social and Financial Implications to School Boards of Declining Enrolment."

Chapter 2 of the above-mentioned report is entitled: "Minimum Acceptable Size of Elementary Schools: Findings of a Professional-Opinion Survey."

The rationale for conducting this part of the study is stated as follows:

> Any consideration of the educational implications to school boards of declining enrolment must relate such a decline to the effectiveness of smaller as opposed to larger schools. Conventional wisdom states that, in a situation of declining enrolments, individual schools will decline in population to the point where quality education will suffer. Is there indeed some minimum size of school below which it is impossible (or uneconomic) to offer a quality education program?

In order to determine the views of teachers, principals, and supervisory officers about the minimum size of a satisfactory elementary school, a survey was undertaken in the spring of 1975.

METHODOLOGY

Questionnaires (both English and French versions of a principal's and a teacher's questionnaire) were administered by the project research staff to all principals, vice-principals, and teachers in 144 elementary schools chosen to reflect the distribution of elementary school teachers in Ontario.

Another questionnaire was mailed to all supervisory officers, concerned with elementary education, employed by the 21 boards having jurisdiction over the 144 schools in the sample. Completed questionnaires were received from 120 of these supervisory officers.

The schools were selected in such a way as to be representative of the following board and school characteristics (number of teachers representing each characteristic shown after each sub-characteristic.

Board Characteristics	Teachers	Principals	S.O.'s
1. Degree of Urbanization			
Large City	535	53	84
Includes Large City	261	34	18
Includes Small City	414	55	13
Includes No City	139	25	5
	1,349	167	120
2. Location			
Northern Ontario	221	35	4
Southern Ontario	1,128	132	116
	1,349	167	120
3. Size (enrolment)			
Up to 8,000	297	48	9
8,000-15,000	446	52	23
15,000+	606	67	88
	1,349	167	120
4. Board Type			
Public	1,026	123	112
Separate	323	44	8
	1,349	167	120

School Characteristics	Teachers	Principals
1. School Size (number of classrooms)		
up to 100	47	17
101-150	128	24
151-300	331	48
301-500	421	45
500+	422	32
	1,349	166
2. School Type		
K-6	586	68
K-8	511	64
7-8	186	20
Other	76	13
	1,349	165

THE QUESTIONNAIRES

The questionnaires elicited information concerning individual characteristics.

The following tabulation shows the individual characteristics and sub-characteristics and the number of respondents in each.

Individual Characteristic	Sub-Characteristic	Teachers	Principals	Supervisory Officers
1. Certificate	Standard I	254	N/A	N/A
	Standard II	387		
	Standard III	238		
	Standard IV	415		
	other	53		
		1,347		
2. Specialist Certificate?	Yes	202	N/A	N/A
	No	1,104		
		1,306		
3. Academic Qualifications	Less than B.A.	866	17	N/A
	B.A.	288	38	8
	B.A. Master's	154	50	18
	Master's or Higher	37	61	87
	Doctoral Work Begun	N/A	N/A	7
		1,345	166	120
4. Years of Experience*	1-4	330	22	7
	5-8	326	60	18
	9-12	357	34	24
	13+	324	48	71
		1,337	164	120

*For principals and supervisory officers, administrative experience only.

Individual Characteristic	Sub-Characteristic	Teachers	Principals	Supervisory Officers
5. Teaching Arrangement	Single Grade	575		
	Mixed Grades	417	N/A	N/A
	Rotary	305		
		1,297		
6. Grade Level Taught	JK/K	159		
	1-3	544	N/A	N/A
	4-6	544		
	7+	372		
		1,619*		
7. Principals' Teaching Duties	Teaching Duties	N/A	104	N/A
	No Teaching Duties		61	
			165	
8. Range of Experience** (School Size)	Small only (up to 100)	20	11	
	Medium Only (101-300)	186	28	
	Large Only (301+)	468	33	
	Small and Medium	86	12	
	Small and Large	56	5	
	Medium and Large	334	52	
	Small, Medium and Large	112	13	
		1,262	154	

*Some teachers taught in more than one category.

**For teachers, teaching experience, for principals, administrative experience.

Individual Characteristic	Sub-Characteristic	Teachers	Principals	Supervisory Officers
8. con't	Some small	274	41	
	Some Medium	718	105	
	Some Large	970	103	
		1,962	249	

Responses were sought from all three groups of respondents on the following items:

1. Opinion as to minimum size of school that can provide quality education (separately for K-6, K-8 and 7-8 schools).

2. Conditions expected to occur in schools below selected minimum. (Separately for K-6, K-8 and 7-8 schools.)

3. Whether conditions expected to occur in (2) were seen as disadvantages for the provision of quality education. (Separately for the three types of schools.)

4. Whether the disadvantages noted in (3) influenced respondents' decisions as to minimum size. (Separately for the three types of schools.)

5. Rating of the value of seven possible remedial actions to offset the disadvantages of small schools.

Responses were sought from teachers and principals on the following items.

6. Selecting and ranking in order of importance, 5 of 11 factors that might influence their choice of a school in which to teach (administer).

7. In which of five sizes of school they would prefer to work, all other factors being equal.

Responses were sought from supervisory officers concerning the following item:

8. The importance they would place on each of 6 factors when recommending to a school board closure or non-closure of an elementary school.

RESULTS

Item 1: Minimum Size of a Satisfactory Elementary School

	Teachers			Principals			Supervisory Officers		
	K-6	K-8	7-8	K-6	K-8	7-8	K-6	K-8	7-8
Mean	7.35	9.61	7.10	7.18	9.11	9.04	8.35	11.48	11.53
Median	7.20	9.32	6.12	6.50	8.83	8.13	7.80	10.28	11.54
Mode	8	10	6	4	10	8	8	10	12

The chief finding relative to this item was that the majority of each of the three groups felt that the minimum satisfactory size of a K-6 or K-8 elementary school was at least one classroom per grade level. Nevertheless about 20% of the teachers and about 30% of the principals felt that quality education could be provided in a K-6 school with fewer than 5 classrooms. Another surprise was that the K-6 minimum size receiving the largest support from principals was 4 classrooms.

There is no consensus within or among the three groups sampled as to an absolute minimum size for any type of elementary school.

References on Item 1 were compared with board, school, and individual characteristics with the following results:

BOARD CHARACTERISTICS

Degree of Urbanization was significantly related, at the 1% level of confidence, to minimum sizes chosen by teachers for K-6 schools, by teachers and principals for K-8 schools, and by all three groups for 7-8 schools. In all cases, the tendency was for respondents from the more highly urbanized boards to pick larger and those from more rural boards to pick smaller, minimum sizes.

Board size was significantly related, at the 1% level of confidence, to minimum sizes chosen by teachers for all three types of schools and by principals for K-8 and 7-8 schools. Board size did not seem to be related to supervisory officers' choice of minimum size for any type of school. In all cases, where a significant relationship existed, respondents from smaller boards tended to pick smaller and those from larger boards, larger, minimum sizes of schools.

Geographical location (north/south) was significantly related, at the 1% level of confidence, to minimum sizes chosen by teachers for all three types of schools but was not related to choices made by principals and supervisory officers. Teachers employed by northern boards tended to favour smaller minimum sizes than did teachers from southern boards.

Board type was significantly related only to the minimum sizes of 7-8 schools chosen by supervisory officers. Those from separate school boards chose smaller minimums than those from public school boards.

SCHOOL CHARACTERISTICS

The size of school in which the respondents were employed was significantly related to the minimum sizes selected by teachers and principals for all three types of school. Most teachers and principals considered the size of school in which they were employed as adequate or more than adequate for quality education. Thus 64% of teachers and 60% of principals employed in 1-4 classroom schools chose minimum sizes of K-6 schools in that range; 85% of teachers and 83% of principals in 5-7-classroom schools picked minimum at or below 7 classrooms. Corresponding figures for a K-8 school were: 36% of teachers and 35% of principals in 1-4-classroom schools and 50% of teachers and 57% of principals in 5-7 room schools. One must conclude that many teachers in smaller K-6 schools, while feeling that their size school could provide satisfactory education in grades K-6, felt it would be too small for a K-8 school.

Type of school in which respondents were employed was significantly related to the minimum sizes selected by teachers, but not by principals, for all three types of school. Teachers in K-6 schools were less apt to pick minimums for K-6 schools in the 1-4-classroom range than were teachers in the other two types of school, while teachers in K-8 schools were much less apt to pick K-6 minimum in the 9-plus-classroom range than were teachers in the other two types of school. The same pattern emerged when selecting minimums for a K-8 school. But when selecting minimums for a 7-8 school teachers in such schools were less likely than those in K-6 and K-8 schools to pick a size in the 1-4-classroom range, and more likely to pick one in the 9-plus-classroom range.

Type of teaching certificate, whether or not a teacher possessed a specialist's certificate, academic qualifications, and years of teaching or administrative experience were not significantly related to respondents' opinions with respect to minimum satisfactory size of an elementary school.

Teaching assignment of teachers was significantly related to the minimum sizes selected by teachers for all three types of school. Teachers of single grades in K-6 and K-8 schools were much less apt to pick small minimum sizes (1-4 classrooms) than were mixed-grade teachers and those with rotary assignments. On the other hand, mixed-grade teachers in these types of school were much more apt to select minimums in the 9+ size range than were teachers with single-grade or rotary assignment. For 7-8 schools, where almost all teachers are on rotary assignment, teachers on such an assignment were least apt to select small minimums and most apt to select large ones.

Whether principals had a regular teaching assignment or not, was not significantly related to their selection of a minimum size school for any of the three types.

Grade level taught was not significantly related to teachers' selection of minimum satisfactory sizes for any of the three types of schools.

Range of experience was strongly related to the selection of minimum size schools by teachers and principals but not by supervisory officers for all three types of school. Generally, it was found that the experience of respondents affected their choice of a minimum size of school favourably, i.e. experience in small schools tended to be associated with minimums that were in the small school range and experience in large schools to be associated very little with low minimum sizes.

Items 2-4: Conditions Expected to Occur in Schools below Respondents' Selected Minimums and Their Effect on Choice of Minimum Sizes

The results of this question were very similar for the three types of school. Only those for a K-6 school will be discussed, therefore. Two of the conditions listed -- low teacher morale and low student morale -- were considered unrelated to small school size in the opinion of most respondents.

About three-quarters of the responding teachers reported that schools below their minimum size would likely lack teachers with specialties, have a high proportion of mixed grades, and lack a librarian. From one-half to two-thirds indicated that these conditions would be disadvantageous to quality education, and over two-fifths reported that the possibility of such conditions had influenced their answers about minimum size. The response from principals was similar, but about 55% of the principals as opposed to about 42% of the teachers indicated that the possibility of a shortage of specialized teachers and the lack of a librarian had influenced their answers on minimum size. Of supervisory officers, 85% expected that schools below their minimums would lack teachers with special skills and have a high proportion of mixed grades, while three-quarters did not expect such schools to have a librarian. Supervisory officers had placed more emphasis on the presumed lack of special skills in setting their somewhat higher minimum sizes than had principals and teachers. They were not as concerned as were principals and teachers about a high proportion of mixed grades.

A larger proportion of each of the three groups of respondents reported that sharing a principal with another school (twinning) was more disadvantageous than a situation in which a principal teaches part-time.

Not surprisingly, of the three groups, principals were more concerned about these two possibilities than were supervisory officers and teachers.

Limited opportunities for professional development and limited extra-curriculum activities in small schools, were of concern to a higher proportion of supervisory officers than of teachers or principals.

These results indicate that the respondents share real concerns about disadvantageous conditions which may occur in small schools. These concerns focus particularly on the lack of specialist teachers, lack of a librarian, and the use of mixed-grade classes. Because of the range of opinion about minimum size in absolute terms, it is impossible to say which conditions are anticipated to become problematic at which sizes. Tables were constructed and inspected that cross-tabulated these data with those of minimum size. No clear trends were evident. Possibly the interaction between type of school, minimum size, and opinions about the probability or seriousness of these conditions are too involved to reveal any simple patterns.

However, as selected minimum sizes rose, the proportion of respondents who saw these conditions as disadvantageous also increased, i.e. those who selected high minimum sizes were more concerned about the existence of these conditions than those who selected low minimum sizes.

Item 5: Value of Possible Compensatory Actions in Small Schools

The proposed compensatory actions which the professionals were to assess as to whether they were of little, moderate, or considerable value in schools approaching minimum size were:

1. Decrease class size.
2. Provide extra learning resources so that an effective learning materials centre can be maintained.
3. Ensure that teachers collectively have as many of the specialties as possible.
4. Use itinerant or part-time teachers to supply missing expertise.
5. Call upon the expertise of volunteers from the community.
6. Make greater than average use of teacher aids.
7. Increase the time central office consultants spend in the school.

The actions most favoured by the three groups of professionals were the first three in the list above. Almost three-quarters of the teachers and two-thirds of the principals in the survey reported that decreased class size would have considerable value in alleviating the problem associated with small schools; (rank #1 for both of these groups), only about 7 percent of each of these groups saw this strategy as having little or no value. But supervisory officers' responses were quite different -- only one-third saw decreased class size as of considerable value (rank 5) and about 23% rated it as having little or no value.

The action most highly ranked by supervisory officers was 3 above -- ensuring that teachers collectively leave as many of the specialties as possible; two-thirds rated it as of considerable importance. A similar fraction of principals also rated it (rank 2), while about 53% of teachers (rank 3) also found it to be of considerable value. Overall, then, this compensatory action was the one receiving the greatest degree of consensus from the three professional groups.

The third of the most favoured compensatory actions was 2 in the list above -- providing extra learning resources so that an effective learning materials centre can be maintained.

Sixty-four percent of principals (rank 3) and 69% of teachers (rank 2) rated this action as of considerable value, and while only 48% of supervisory officers rated it thus, this action was still rated +2 by them (on average, only 37% of supervisory officers as opposed to 45% of principals and 48% of teachers rated compensatory actions as of considerable value).

The remaining five compensatory actions received the following support from the three groups.

Use of Itinerant Teachers. Supervisory officers ranked this as 3rd in the "considerable value" column and only 6% rated it as of little or no value. Teachers and principals rated it 4th in "considerable value" but 14% of teachers and 9% of principals said it would be of little or no value. In none of the three groups was this action rated as of considerable value by more than half the respondents, although 47% of teachers so rated it. For teachers and principals it ranked 4th and for supervisory officers, 3rd.

Using the Expertise of Volunteers. For all three groups this device ranked 6th in percentage of respondents that saw it as having considerable value. The percentages were in the 29-36% range with the teachers favouring it more than and the supervisory officers less than the principals. Between 15 and 16% of all three groups ranked it as of little or no use.

Greater Use of Teacher Aides. This action ranked 5th with teachers and principals and 4th with supervisory officers as being of considerable value in compensating for the smallness of schools. Only between 33 and 38 percent of respondents so ranked it. Those seeing it as of little or no value ranged from 14% of principals and supervisory officers to 17% of teachers.

Greater Use of Central Office Consultants. This was the least useful action according to respondents. All three ranked it seventh in the "considerable value" column. Only 11% of supervisory officers, 18% of principals, and 20% of teachers saw it as of considerable value. On the other hand, between 43 and 60% saw it as being of moderate value.

Item 6: Importance of Various Factors in Determining Choice of School for Teachers and Principals

In an effort to determine whether and to what extent size of school is important to teachers and principals when deciding on a place to work, teachers and principals were asked to pick 5 factors from a list of 11 and rank order these 5 in order of importance. The report looks at two results (1) the percentage of 1st and 2nd choices for each factor and (2) the percentage of respondents that did not pick a factor as one of the five. The following tabulation summarizes these results.

Teachers' and Principals' Ratings of the Importance of Various Factors to Choice of School in Which to Work

Factor	% of Respondents for Which Factor Was			
	1st/2nd choice		Not Selected	
	Teachers	Principals	Teachers	Principals
Class Size	41	17	23	40
Principal (Superintendent)	29	8	37	74
Students' Age Range	25	16	46	67
Traditional or Open Plan	26	18	47	55
Facilities	17	33	47	20
Compatibility of Staff (Composition)	18	54	48	14
Distance From Residence	16	5	56	83
Type of Neighbourhood	8	15	70	52
Students' Ability Range	11	3	72	86
School Size	3	28	80	24
Proportion of Students Bused	0	1	95	91
Spearman Rank order correlations				
	rho=.318		rho=.295	

The responses clearly showed two things:

(a) That schools size is seen as of very little importance to teachers but of considerable importance to principals when considering the desirability of a work-place, and

(b) That teachers and principals are two different populations as far as their perceptions of what are important factors affecting the work-place are concerned.

The first conclusion is borne out by the facts that whereas only some 3 percent of teachers put school size in first or second place, some 28 percent of principals did so, and that while some 80 percent of teachers did not pick school size among their five most important factors, only some 24 percent of principals did not do so.

The second conclusion may be deduced from the Spearman rank-order correlations between the rankings of principals and teachers on the importance of the 11 factors. For first and second choice the Spearman rho was +.318 while for percentage not picking a factor it was only +.295.

By looking at the "not selected" column it is clear that, for teachers, class size and the school's principal are by far the most important conditions of work to be considered. On the other hand, for principals, composition of staff, school facilities and school size are the most important.

Item 7: Preferred Size of School

On a forced choice as to preferred size of school, 22% of teachers and 13% of principals picked sizes in the 1-7 classroom range (1-150 pupils). On the other hand only 10 percent of teachers and 9 percent of principals would prefer to teach in schools with more than 18 classrooms (over 500 students). The largest group of teachers (39%) preferred a school in the 8-11 classroom range (151-300 students) and the largest group of principals (44%) are in the 12-18 classroom range (301-500 students).

There was a significant relationship between preferred size of school and opinion as to minimum satisfactory size of a school.

As might be expected teachers were likely to select minimum sizes for K-6 schools at or below their preferred size. Most would not want to teach in schools which they considered too small to provide quality education. The exception seems to be those teachers who preferred to teach in 1-4-room schools. Over two-fifths of them recommended minimum sizes higher than the size in which they preferred to teach. This result may throw some doubt on the validity of responses from teachers of very small schools. It seems unreasonable to prefer to teach in a school that one feels cannot provide a quality education.

Most teachers who preferred large schools (over 12 classrooms) selected minimum sizes below that range. Over four-fifths of those indicating a preference for 12-18 classrooms and 95% of those indicating a preference for 19 or more classrooms selected minimums below that size.

Item 8: Importance of Some Factors Influencing Recommendations to Close A School

Supervisory officers were asked to rate the importance of six factors which they might consider when making a recommendation to close or not to close a school suffering from declining enrolment. Four categories of importance were specified: unimportant, of little importance, very important, and of the highest importance. The results are presented in Table A.

It is clear from Table A that the quality of the school program far outweighs the other five suggested factors in the opinion of supervisory officers as being the major consideration when recommending the closure of a school -- 73.1% of the respondents gave this reply. Other candidates for "of highest importance" status were much less highly favoured; the next highest (importance of school to the community) being selected by only 29.2% of the supervisory officers. This finding should be viewed in conjunction with the minimum sizes selected. Supervisory officers seem to be saying that schools should be closed if they fall below rather high minimum sizes. But the picture changes considerably when we look at the last two rating columns of Table A combined. This gives us the following ranking and percentages for factors rated as at least "very important."

TABLE A -- ASSESSMENT OF SUPERVISORY OFFICERS OF THE RELATIVE VALUE OF VARIOUS FACTORS IN RECOMMENDING SCHOOL CLOSURE

Factor	Degree of Importance							
	Unimportant		Of Little Importance		Very Important		Of the Highest Importance	
	No.	%	No.	%	No.	%	No.	%
Quality of School Program	1	0.8	4	3.4	27	22.7	87	73.1
Per-Pupil Cost	4	3.4	19	16.1	84	71.2	11	9.3
Importance of School to the Community	--	--	2	1.7	83	69.2	35	29.2
Official Board Policy	10	8.6	34	29.3	52	44.8	20	17.3
General Professional Opinion	1	0.8	20	17.1	81	69.2	15	12.8
Opinion of School Staff	1	0.8	36	30.3	73	61.3	9	7.6

n = 116-120

Rank	Factor	Percent
1	Importance of School to the Community	98.4
2	Quality of School Program	95.8
3	General Professional Opinion	82.0
4	Per-Pupil Cost	80.5
5	Opinion of School Staff	68.9
6	Official Board Policy	62.1

It now appears that the importance of the school to the community and the quality of the school program are equally important in supervisory officers' eyes. Together in the low 80 percents are general professional opinion and per-pupil cost and in the low 60 percents the opinion of school staff and official board policy.

There is an interesting dichotomy in these pairs. According to the supervisory officers, quality of program would dictate closing schools below a certain size but community pressures would suggest they remain open. General professional opinion says smaller schools are more "humane" and contribute to better school morale, while per-pupil cost studies indicate such schools are more expensive than larger ones. Finally the staffs of marginal schools would probably favour continued operation while board policy would often be to close schools below a certain size.

The typical supervisory officers' recommendation, therefore, would be a delicate compromise between opposing principles, probably weighted towards the educational as opposed to the social and financial considerations.

CONCLUSIONS

In this study the investigators attempted to assess the educational implications, to school boards, of declining enrolments. They sought to find out whether there is any consensus among those engaged in elementary education as to when a school becomes too small to provide a satisfactory education, why small schools are considered unsatisfactory, and, where there is no alternative to a smaller school, ways of ameliorating the unsatisfactory aspects of small schools.

A stratified sample of elementary teachers, their principals and vice-principals, and the supervisory officers of their employing boards who are concerned with elementary education responded to questionnaires.

There is no clear-cut agreement within or among the three groups as to an absolute minimum size for an elementary school

(5.3% of teachers, 5.8% of principals, and 1.6% of supervisory officers felt that one or two operating classrooms could still provide a satisfactory education in JK-6 schools -- for a JK-8 school the corresponding percentages were 3.7, 3.2, and .9).

However, majority opinion in all three groups favoured having at least one operating classroom per year or grade level (for K-6 schools 62.4% of principals, 72.2% of teachers, and 74.8% of supervisory officers picked minimum sizes of 6 or more classrooms; and for K-8 schools, 65.4% of principals, 73.8% of teachers, and 80% of supervisory officers picked 8 or more classrooms).

Principals have a greater tendency to pick smaller minimums than have teachers and teachers, in turn, a greater tendency to pick smaller minimums than supervisory officers.

There is enough divergence, however, to indicate that what may appear to be an absolute minimum size to one group of teachers or administrators may be considered quite adequate by another group.

There is no kind of agreement with respect to minimum size of senior public or intermediate schools.

Three major disadvantages of small schools, in the opinion of the three groups, are as follows:

1. The various specialties (music, art, special education, physical education) cannot be adequately covered by the staff of a small school.

2. A high proportion of mixed grades (seen as a disadvantage) is necessitated.

3. There is usually no librarian and resource centre.

Ways in which small schools could be made more effective are to:

1. Have a conscious policy of selecting teachers who can collectively teach as many of the specialties as possible.

2. Decrease class size.

3. Provide extra learning materials and a well-equipped resource centre.

Some of the differences of opinion within groups reflect the background of the respondents and their present and past situations. Larger minimum sizes tended to be selected by teachers and principals from urban boards, large boards, and large schools, and by those whose experience has been in medium- and large-size schools. On the other hand, smaller minimum sizes tended to be chosen by teachers and principals from small boards, rural boards, and small schools, and by those whose experience included experience in small schools.

Surprisingly, more teachers did not consider school size to be an important factor in their choice of a school in which to teach.

Principals, however, did rate school size very high among considerations in the choice of a school in which to be principal.

If one classroom for each year or grade level is accepted as a legitimate criterion of minimum school size, it must be noted that there are a large number of schools in operation in Ontario that are unsatisfactory by the criterion. Inspection of the actual situation according to the Directory of Education for 1975-76 shows that many of the boards that operate such schools have attempted to lessen the disadvantages of small schools by decreasing pupil-teacher ratios in them.

For the first 100 schools listed in the Directory as having fewer than 150 students in a junior school, or fewer than 200 students in a junior-senior school, the range in pupil-teacher ratios is from a low of 13.50 to a high of 27.33, with a median of 20.70. In comparison, the first 100 schools having more than 500 students in a junior or junior-senior school have pupil-teacher ratios ranging from 20.23 to 31.67, with a median of 25.67. The existence of such a large difference in medians after a period of five years of expenditure ceilings indicates that boards have felt the need to staff their smaller schools more generously than their larger schools in order to maintain the educational quality of the programs being offered. They have done so even though it has meant higher per-pupil costs in small schools than in larger ones. The implication is that as enrolments decline, borderline schools, in order to maintain the quality of their programs, require proportionately more staff, and thus incur increased per-pupil costs. There is not much that can be done about this problem in the case of rural schools, in view of the rapidly increasing costs of busing. But urban and suburban schools have the alternative of closing a small school. The implications of this alternative have been dealt with in an earlier part of this study.*

GENERAL COMMENTARY ON THIS STUDY

While there were obviously educational implications to the question of whether or not to close a school (see Part 1), this study of professional opinion as to minimum size of a satisfactory elementary school was the major attempt to look at the purely educational aspects of declining enrolment. There are, however, important educational implications that are not discussed or researched in this study. Foremost among these, of course, is the effect of declining enrolment on staff -- the problems of (i) an aging staff, (ii) lack of vertical and lateral mobility, (iii) problems involving reduction in force (RIF) especially of tenured staff, and (iv) morale.

I conclude from this study that there is no real consensus as to an absolute minimum size of school below which quality education is impossible. There is, however, a similarity in the patterns of response of the three professional groups, particularly for K-6 and K-8 schools. When the percentages of each group of respondents selecting sizes from one to 19 plus classrooms as a satisfactory minimum are ranked and a Spearman rho calculated, we get the following patterns of agreement:

1. Greatest agreement: between teachers and principals as to minimum size of K-6 (.915) and K-8 (.924) schools.

2. High level of agreement: between principals and supervisory officers as to minimum size of a K-6 school (.841).

3. Medium level of agreement: (a) between principals and teachers as to minimum size of a 7-8 school (.756); (b) between teachers and supervisory officers as to K-6 (.777) and K-8 (.709) schools; and (c) between principals and supervisory officers as to K-8 (.760) and 7-8 (.736) schools.

4. Least agreement: between teachers and supervisory officers as to minimum size of a 7-8 school (.483).

One conclusion that might be made from the opinion survey is that a school staff will probably not see a decline in the enrolment of its school as indicating that quality education can no longer be provided in it. Such a conclusion will more likely be reached by supervisory officers and the senior administrators of the boards. I make this conclusion on the basis that most teachers and principals picked minimum sizes below the size of school in which they were employed. A teacher or principal in a ten-room school may consider a 4-room school unsatisfactory, but a teacher or principal in a school of the latter size will tend not to so consider it.

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*See Rideout, E. Brock et al. Meeting Problems of Declining Enrolment, Ministry of Education, Toronto, 1975.

I have the feeling that some of the replies to this questionnaire were deliberately facetious. This would have been caused by the fact that answering the questionnaire was not a voluntary act. All of the teachers in each school were assembled, together with the principal, at noon hour or after school, on their own time, and asked to fill out the questionnaire in the presence of our investigators. While this procedure ensured a very high return it may have sacrificed something in validity.

Another observation is that concern over whether good teachers and principals will be willing to serve in smaller schools is rather academic in view of the surplus of teachers in the foreseeable future.

One finding of this study has important implications for cost. All three solutions seen by the three groups as contributing most to compensating for the problems faced by small schools -- making sure that teachers collectively possess the various subject specialties, ensuring an effective resource centre and library, and reducing class size -- will increase the per-pupil cost of small schools.

REPORT #I Abstract and Comment on Reports on Current Research into Declining Enrolment

Part 4 Abstract of and Commentary on Chapter 3 of the publication "Educational, Social, and Financial Implications to School Boards of Declining Enrolments"

by E. Brock Rideout

Abstract of and Commentary on Chapter 3 of the publication "Educational, Social, and Financial Implications to School Boards of Declining Enrolments"

This chapter sets out to study certain aspects of the relationship between elementary school size and cost per pupil. In a couple of introductory paragraphs, however, it discusses briefly a technical reason why declining enrolment does not result in lower mill rates for education. The percentage equalizing grant results in a board's mill rate for ordinary operating expenditure at or below the grant ceiling set by the Regulation being proportional to the expenditure per weighted pupil. This means that the mill rate for that board is independent of the number of students being educated. It should be noted that this statement is true with respect only to expenditure at or below the grant ceiling. It is obvious that, since expenditure above the ceiling is met entirely from local taxation, the mill rate to pay for such excess will be directly proportional to the product of the number of such pupils and the expenditure per pupil in excess of the ceiling and inversely proportional to the equalized assessment. It is pointed out that if, as is usually the case, boards cannot reduce their total costs at the same rate as enrolment declines, that is, cut all types of staff as well as overhead by, say 3 percent for a 3 percent decline in enrolment, the expenditure per pupil will rise and so will the mill rate. The saving resulting from fewer students accrues to the Province, which uses the money thus freed to increase the total grant, thus relieving all property tax payers from increases in mill rates they would otherwise have been forced to pay.

The cost-per-pupil study sought answers to two questions:

1. Is there a size of school below which cost per pupil is so much greater than above it that the operation of such a school becomes uneconomical? and

2. What are the major reasons for higher cost per pupil (if any) in small schools?

The sample consisted of 24 school boards in Ontario representing urban and rural areas, northern and southern Ontario, public and separate school systems and a range of sizes according to elementary school enrolment. Boards had to be willing and able to provide cost figures at the school level. From these 24 boards a sample of 250 schools was selected, 50 in each of five size categories according to pupils per grade (PPG). The levels were: 1-15, 16-30, 31-45, 46-60, and over 60 PPG.

In order to remove any effects of different salary scales, different qualifications and years of experience, a set of salaries, roughly representative of provincial averages, was used for all schools in the sample instead of the actual salaries. The average salaries used were as follows:

Principals (schools 500+) - $25,000;
Principals (schools less than 500) - $24,000;
Vice Principals - $19,000;
Principals' assistants - $15,000;
Classroom teachers - $15,000;
Special education teachers - $16,000;
Teaching assistants - $7,500;
Secretaries/typists - $8,000; and
Custodians - $9,500.

Questionnaires to principals elicited exact information with respect to the full-time equivalent (FTE) of classroom teachers (including teaching time of principals and vice principals), administrative personnel (principals and vice principals' non-teaching time only), custodians, and secretaries. Data with respect to pupils was also solicited. Costs were calculated by multiplying the number of FTE's in each of the categories by the average-salary figures listed above. In the case of principals and vice principals, however, the FTE of their teaching time was multiplied by the administrative salary average and added to the teaching cost.

Actual costs (for 1975) were obtained from the principals for the items indicated in the principals' budgets, and from the boards for non-personnel maintenance and operation costs.

Total in-school costs per pupil were then determined for the following seven categories:

1. teaching personnel,
2. administrative personnel,
3. secretarial personnel,
4. custodial personnel,
5. maintenance and operation,
6. supplies, and
7. miscellaneous (books, etc.).

Categories 2-4 were combined in the category: (8) other personnel, and this category with category (1) to form the category: (9) total personnel. Categories 5-7 were combined to form the category (10) non-personnel. The total of categories 9 and 10 constituted (11) total cost per pupil.

From the 250 schools solicited, two sets of usable replies were received: 216 schools in the JK-8 range and 202 schools (a subset of the 216), none of which had 10 percent or more of its enrolment in special education classes. No marked differences were found between the two groups with respect to the matters under study. When the per-pupil-costs in categories 1, 8, 9, 10, and 11 were calculated in class-intervals of 100 pupils and these costs converted to indexes based on the costs in schools with 800+ pupils as 100, the following results were obtained: for total cost per pupil, schools in the 100-199 pupil range cost on the average 20 or 19* percent more than those with 800+ students, while schools with fewer than 100 pupils cost 42 or 41 percent more. On the other hand, schools in the 200-299 pupil range cost only one percent more than did those in the 800+ range.

From this first analysis it looked as though 200 pupils was the cutting point below which there was a substantial increase in per-pupil cost. In order to check whether the point could be determined with greater accuracy, the data were reexamined in class intervals of 20 pupils (with the bottom class containing all schools with fewer than 60 pupils).

Table I shows the results of the two procedures with cost per pupil expressed in terms of indexes based on cost per pupil for all schools in the sample with (a) 800 or more pupils; (b) 300 or more pupils; and (c) 400-499 pupils. The right-hand side of the table expands part of the left-hand side. Thus it can be seen that for schools with under 100 pupils the cost per pupil rises consistently as the size decreases, with the dramatic increase in cost coming in the under 60-pupil schools - 88, 94, and 102 percent higher than for the average of the sample schools with 800 or more pupils, with 300 or more pupils, and with between 400 and 499 pupils.

But for schools between 100 and 199 the breakdown by 20's

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*20% for the 216 schools, 19% for the 202 schools.

Table I

Indexes of Total Per-Pupil Cost Based on the Average of Schools in the (A) 800+-pupil group; (B) 300+-pupil group; and (C) 400-499-pupil group

Size of School	No. of Schools	Indexes of Cost Per Pupil		
		A	B	C
0-99	25	141	145	159
100-199	42	119	122	127
200-299	44	101	103	107
300-399	36	100	103	107
400-499	25	93	96	100
500-599	11	94	97	101
600-699	9	97	100	104
700-799	7	92	95	99
800+	3	100	103	107
0-59	5	188	194	202
60-79	6	136	140	146
80-99	14	125	129	134
100-119	10	120	123	128
120-139	9	119	122	127
141-159	7	109	112	117
160-179	11	127	130	136
180-199	4	108	111	115
200-219	13	99	102	106
220-239	5	90	101	106
240-259	5	106	109	113
260-279	11	100	103	107
280-299	9	98	100	105
300+	93	97	100	104

did not show as clear-cut a trend. The consistent increase in cost per pupil as enrolment dropped from the 180-199 pupil group, by groups of 20 pupils, to the 100-119-pupil group was offset by the 160-179-pupil group (N=11) which had the highest per-pupil expenditure of any group except the two with fewer than 80 pupils. One problem with the breakdown by class intervals of 20 pupils is the small number of schools in each class. When schools with 100 or more pupils are grouped in class intervals of 40 instead of 20 the indexes are as follows, based on the average cost of schools with 300 or more pupils:

Size Range	Index	N
100-139	123	19
140-179	123	18
180-219	104	17
220-259	105	10
260-299	102	20
300+	100	93

This would indicate that the breaking point would be 180 pupils (as opposed to 200 as deduced from the breakdown by class intervals of 100 pupils).

The analysis of per-pupil total cost by size of schools according to pupils per grade (PPG) showed about a 20% increase below 20PPG and about a 90% increase below 10 PPG. The former figure corresponds with a K-8 school of 180 pupils or a K-6 school of 140 pupils, while the latter corresponds to a K-8 school of 45 pupils or a K-6 school of 35.

The answer to the first research question then appears to be: "A school begins to cost substantially more per pupil than a school of average size when its enrolment falls below 180 pupils or 20 pupils per grade." On the other hand, the increase does not exceed 30% until a school falls below 100 pupils or below 10 pupils per grade.

Components of Increased Cost Per Pupil

When measured against average cost per pupil per school for the 93 schools having more than 300 pupils enrolled, the components of increased cost per pupil rank in the following order on a percentage increase basis for schools in the 160-180-pupil range (N=11): (1) maintenance and operation +89%; (2)

secretarial personnel +80%; (3) administrative personnel +69%; (4) custodial personnel +46%; (5) teaching personnel +21%; (6) supplies +11%; and (7) books, etc. +7%. For schools with fewer than 60 pupils the ranks and respective percentage increases were as follows: (1) administrative personnel +172%; (2) custodial personnel +171%; (3) maintenance and operation +132%; (4) teaching personnel +82%; (5) secretarial personnel +65%; (6) books, etc. +33%; and (7) supplies +22%.

In terms of increased dollar cost, however, the rankings are quite different, since teaching cost constitutes about 75% of total cost. The increased dollar costs rank as follows as compared with those of the 300+-pupil schools: (1) teaching personnel +$146; (2) administrative personnel +$44; (3) maintenance and operation +$42; (4) custodial personnel +$27; (5) secretarial personnel +$16; (6) supplies +$2; and (7) miscellaneous (books, etc.) +$1.

Table II shows the dollar and percentage makeup of (1) the average per pupil cost of the 93 schools with enrolments of 300 or more and (2) the increase in per pupil cost over the 300+ figures for (a) schools just below the breaking point (180 pupils) where cost per pupil begins to rise seriously and (b) schools in the lowest size category - those with fewer than 60 pupils. An examination of the last three columns shows that while cost per pupil of teaching personnel for the 300+-pupil schools was 75.6%, it accounted for only 52.5% and 65.7% respectively of the increase in cost per pupil at the 160-179-pupil and less-than-60-pupil levels. Other categories account for dramatically higher percentages of the increased cost: administrative personnel jumps from accounting for 7% to accounting for 15.8% and 12.8% respectively. Custodial personnel shows similar marked increases. On the other hand, for the smallest schools, secretarial personnel, supplies, and books, etc. account for smaller percentages of the smallest schools' per pupil increase than they did of the total per-pupil-cost of the 300+-pupil schools.

Table III shows similar information for the schools as classified by pupils per grade. The group just below the breaking point (20 PPG) and the smallest group (those with fewer than 10 pupils per grade are examined). Although the percentages are different (the base is the 60 schools with 60 or more PPG - average $959 per pupil as opposed to the $917 per pupil for 300+ schools used in Table II), the relative positions are similar.

Table II

Relative Importance of Seven Expenditure Categories in Per-Pupil Cost Increases in Schools Grouped in Class Intervals of 20 Pupils

Exp. Category	Cost Per Pupil in Schools above 299 (n = 93)	Increase in Cost Per Pupil in Schools of 160-179 (n=11)	60 (n=5)	% Increase in Cost 160-179	60	% of Cost Per Pupil in 300+ Schools	% of Total Increase 160-179	60
	$	$	$	%				
Teaching	693	146	566	21	82	75.6	52.5	65.7
Administrators	64	44	110	69	172	7.0	15.8	12.8
Custodians	59	27	101	46	171	6.4	9.7	11.7
Secretaries	20	16	13	80	65	2.2	5.8	1.5
Maint. & Op.	47	42	62	89	132	5.1	15.1	7.2
Supplies	18	2	4	11	22	2.0	.7	.5
Books, etc.	15	1	5	7	33	1.6	.4	.6
Total Cost	917	278	861	30	94	100.0	100.0	100.0

Note: Columns may not add because of rounding.

Table III

Relative Importance of Seven Expenditure Categories in Per-Pupil Cost Increases in Schools Grouped in Class Intervals of 5 PPG

Exp. Category	Cost Per Pupil in Schools above 59 PPG (n = 60)	Increase in Cost Per Pupil in Schools of		% Increase in Cost		% of Cost Per Pupil in 60+ PPG Schools	% of Total Increase	
		15-19 (n=21)	10 (n=9)	15-19	10		19 PPG	10 PPG
	$	$	$	%				
Teaching	713	111	424	16	60	74.3	57.8	52.4
Administrators	65	39	97	60	149	6.8	20.3	12.0
Custodians	67	17	129	25	193	7.0	8.9	15.9
Secretaries	22	14	27	64	123	2.3	7.3	3.3
Maint. & Op.	58	11	120	19	207	6.0	5.7	14.8
Supplies	19	1	4	5	21	2.0	.5	.5
Books, etc.	16	-2	6	-13	38	1.7	-1.0	.7
Total	959	192	809	20	84	100.0	100.0	100.0

Note: Columns may not add because of rounding.

The major differences are:

1. In Table III, teaching cost per pupil constitutes a smaller percentage of the smallest-schools increase than it does of the increase for schools just below the breaking point. This was not so in Table II.

2. The maintenance-and-operation per-pupil costs differ markedly from Table II to Table III. While the cost per pupil of the 300+ and 60 PPG+ schools is about the same - 5.1% and 6% respectively - the percentage triples to 15.1% for the class interval just below the breaking point in Table II but drops below the 6% figure for the similar group in Table III. On the other hand, the percentage drops from 15.1% to 7.2% for the smallest-size schools in Table II while rising from 5.7% to 14.8% for those schools in Table III.

The chapter stresses the relative unreliability of average cost per pupil for the smaller schools because of the great variability in the cost per pupil around the means. Coefficients of variability $\left(CV = \frac{100\ (S.D.)}{Mean}\right)$ were calculated for all class intervals, for each expenditure category, for each of the three distributions (100's and 20's of FTE enrolment and 5 PPG). Examination of the coefficients of variability showed the following:

1. Variability in cost per pupil within class intervals increases as school size decreases.

2. Variability in the smaller size class intervals tends to be very great - standard deviations over 100% of the mean in some cases and over 50% in most.

3. Variation was much less for some expenditure categories than for others; it was smallest for teaching cost and total cost per pupil, but it was so great for books, etc., and maintenance and operation as to make the means rather meaningless.

The implications for school boards of high variability in the lower school-size class intervals are as follows:

1. While smaller schools (fewer than 180 pupils or 20 pupils per grade) will have higher per-pupil costs

on the average than will larger schools, there will be some such schools with low per-pupil costs and others with per-pupil costs much higher than the mean determined in the study.

2. The cost per pupil of small schools depends to a greater extent on board policy and on the specific situation and nature of a given small school than is the case for larger schools.
3. Extremely high per-pupil costs in small schools usually result from attempts to keep the quality of the school program from deteriorating.
4. The high variability in cost per pupil of custodians and secretaries in schools smaller than 300 pupils indicates the wide variation among boards in staffing practices by custodians and secretaries in schools in this size range.
5. The high variability in the mean cost per pupil of administrative personnel for the smaller-size schools implies widely different practice with respect to the amount of administrative time allowed to principals in smaller schools.
6. A considerable part of the variability in cost per pupil of teaching personnel in small schools is caused by variations in the amount of time the higher-priced principal spends in teaching.
7. The patternlessness of the variability of cost per pupil for items in the principal's budget implies that size of school has very little to do with the amount spent per pupil in this item.

General Comments on this Chapter

The uniqueness of this study lies in the relative completeness of the data gathered on a school-by-school basis and on the fact that average salary and wage rates rather than actual ones have been used. This means that staffing ratios and direct costs for non-personnel items are being measured. The weakness in the study is the lack of control of other variables, e.g. schools in high-spending vs. low-spending boards. The study merely assumes that the various types of boards used - northern/southern, public/separate, urban/rural, and small/medium/large - are proportionally represented in each class interval. But with only 216 schools used, this is obviously a false assumption, especially in the distribution by class-intervals of 20 pupils where the numbers were small. For this reason, it is probably best to pay most attention to the distribution by 100's where the numbers were larger.

While no attempt was made to select schools which had, in fact, experienced declining enrolment, it will, nevertheless, be true that a large proportion of the 216 schools will have had such declines. In any event, the policies of boards large enough to employ directors of education are such that staffing practices in schools which have declined in enrolment over several years are not apt to be too different from those in other schools of the same size in the same jurisdiction.

It might be worthwhile to look at the actual schools in the small-size class intervals by type of board and see if there is a relationship between the coefficient of variability and the board characteristics of the schools in these class intervals.

This study indicates that there is a quantum jump in per-pupil costs for smaller schools but that the jump does not occur until the school size is pretty small - below 100 pupils, or below 10 pupils per grade. This implies that boards whose policy it has been to have mostly medium- or large-size schools have not as much to fear from declining enrolments (from the point of view of cost per pupil) as have boards that have adopted the policy of having rather small K-6 schools.

Boards that try to maintain educational standards as schools approach 100 pupils in size will tend to find per-pupil costs higher than the means reported in this study, i.e. such schools will be in the upper quartile as represented by the high coefficients of variation found for small-size schools.

REPORT #I Abstract and Comment on Reports on Current Research into Declining Enrolment

Part 5 Abstract of and Commentary on Chapter 4 of the Publication "Educational, Social and Financial Implications to School Boards of Declining Enrolment"

by E. Brock Rideout

Abstract of and Commentary on Chapter 4 of the Publication "Educational, Social and Financial Implications to School Boards of Declining Enrolment."

In the fall of 1974 a preliminary survey questionnaire was distributed to 43 school boards selected in such a way as to be representative of the various types, locations, and sizes of school boards in the province. This questionnaire, as well as asking whether or not the board wished to cooperate further in the broader study, included questions about the use of vacant space in the boards' schools. Forty boards responded to this questionnaire, although only 21 indicated a willingness to participate in further activities of the project.

The preliminary questionnaire sought information concerning the extent to which several possible ways in which vacant space might be used were in fact being used. The following tabulation shows the result for the forty boards that returned completed questionnaires.

Question	"Yes" rather than "No"	
	Number	%
1. Facilities shared with public/ separate board?	8	20
2. New K established since 1969 in school(s) that previously was (were) without it?	23	58
3. New JK established since 1969 in school(s) that previously was (were) without it?	20	50
4. Full-day K program begun since 1969?	10	25
5. Schools used to some extent for		
a. day-care centres?	10	25
b. nursery schools?	8	20
c. community day-time use?	14	35

	Responding "Occasionally" or "Frequently"	
	Number	%
6. Vacant school space used for		
a. program enrichment?	35	88
b. expanded special ed program?	34	85
c. administrative purposes?	19	48
d. co-curricular activities?	28	70
e. decreasing class size?	20	50
f. non-educational purposes?	10	25

The report breaks questions 6b, d, e, and f down according to the four board categories: urban/rural, small/medium/large, public, separate, and northern/southern. From these it can be seen that consistently higher percentages of urban than rural boards, of public than separate boards, of southern than northern boards and of larger than smaller boards made frequent or occasional use of vacant space for increased special education programs, co-curricular and recreational programs, non-educational purposes, and as an opportunity to decrease class size. These, by and large, are the types of boards that have been having the greatest problems with declining enrolment. While almost all boards reported using what vacant space there was to enrich program offerings (art, French, music, science, math, remedial rooms, etc.) and to expand special education programs, only a quarter of them reported frequent or occasional use for non-educational purposes, and only 35% reported that some of their schools were used to some extent for community day-time use. It was these two latter usages that were the subject of the case-study research reported on in this chapter.

For purposes of the study, "alternative day-time use" was defined as the use of space during normal day-school hours by persons other than the students enrolled in and the staff of the school.

From seven large boards previously identified as having fairly well-developed alternative-use programs, 29 schools were selected after consultation with board personnel. Structured interviews were conducted with the principals - 23 in visits to the schools concerned and the other six by telephone.

The report includes details of the case studies of 12 of these schools picked in such a way as to include the various types of alternative day-time uses encountered.

The findings of the study were as follows.

Extent and Location of Vacant Space

In York Borough about 4 schools were involved with alternative day-time use, while in North York, Ottawa and Etobicoke 7 or 8 schools were involved. Toronto, Sudbury, and Hamilton had alternative users in about 15 schools. (These figures are exclusive of schools offering adult day classes.)

In most boards no one person appeared to have all the information regarding the use of school space, although business officials were aware of any sharing which involved payment. Responsibility for alternative use fell to the planners, coordinators of adult classes, community relations officers, and alternative-use coordinators. In some cases the use of vacant space was being arranged on an informal basis by the principal without direction from the central board office.

All of the alternative-use examples were found to be in urban and suburban schools, and most were in elementary schools. Only two high schools involved in alternative use were located. This was predictable, since declining enrolment is only now beginning to affect high schools, and use of vacant space by the school itself is more likely at the secondary level.

Vacant space was found in schools of all ages -- one of the schools involved had been built in 1895, and the most modern one in 1967. All principals stated that the buildings were in good condition.

Use of Surplus Space for Educational Purposes

One of the advantages of having vacant space is the opportunity for the extension of enrichment and/or remedial programs in a school. Almost all the principals interviewed indicated that usage of this type had occurred before the space was made available to outside users. A number of empty classrooms are now being used for special-education programs ranging from remedial reading to, in one case, an art therapy program. These programs are not necessarily used exclusively by the students in a particular school, since boards transport students in some cases to take advantage of them.

Additional ESL/ESD (English as a Second Language/English as a Second Dialect) classes may also put some empty classrooms to use.

In the area of enrichment, the most common conversion of a classroom was to a permanent French room. This is considered by principals and teachers to be a distinct advantage. In the past, French teachers have not been able to create the proper "atmosphere" when forced to change rooms constantly. Also, the number of French immersion programs is increasing, and in at least three schools visited, vacant space was being used for such programs.

Vacant rooms were often dedicated to mathematics, science, and music, or were converted into additional space for resource centres or kindergartens. Other uses included guidance areas and mini-gyms. Space is also being utilized for such general purposes as small-group work, audio-visual activities, and lunch rooms.

A few classrooms are now storage areas for school or board equipment. In two schools visited, board-employed consultants had offices, while one school housed a regional audio-visual supply centre. In two cases, classrooms had been "mothballed," that is, locked up in order to save on maintenance costs.

The most common type of alternative use was found to be some kind of day-care or nursery program -- almost half the schools in the study gave space to this type of service, either publicly or privately operated. The case studies that appear in the Appendix describe the operation of these programs in several elementary schools.

The second most common type of use was adult day classes. (Some boards do not define this as an alternative use because the programs are conducted by the board.) Most of the adult classes were recreational, offering such programs as flower arranging, ceramics, sewing, rug hooking, cake decorating, painting, yoga, and macrame, while others, such as typing, might be classified as job training. Two schools had adult ESL classes.

Over one-quarter of the schools investigated housed pre-school programs for children who were handicapped in one way or another -- mentally retarded, crippled, or emotionally disturbed.

Three schools had programs for senior citizens. One was an office where senior citizens could obtain help; the others offered recreational facilities. The YWCA operated recreational programs in two schools and a municipal art class was using space in another. One school housed an agency which provides services for immigrants.

The Etobicoke Board of Education has recently allowed a family court to occupy space in one school. At the time of interviews conducted for the study the court was not yet in operation but recent reports indicate that this type of use is working well.*

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*The court is now occupying four rooms in an area quite separate from the rest of the school. There is no access into the school from the court. The alternative user had renovations carried out and built its own parking lot since residents had expressed concern regarding parking in local streets.

Apart from one notable exception -- a private nursery which had operated in the school for at least 20 years -- most alternative users had been occupying the school space for 2 years or less.

A school for emotionally disturbed children had a staff of 20, but in most cases less than 4 full-time staff members worked for an agency. In terms of those using the services, numbers of people in the school at any one time ranged from 5 (in a day-care centre) to 50 in a school for disturbed children. Of course, service agencies help a large number of citizens -- for example, immigrants or senior citizens -- but these clients are obviously not all in the school at any one time.

With regard to physical arrangements, about one-third of the tenants, mainly those agencies serving children, used a separate entrance from the school population, and at least four agencies have areas of the school that are entirely self-contained, e.g. a whole floor of the school. Facilities which are most commonly shared by users and school are the playground, the gym, and the library, although usually at different times. Users tend to have their own washrooms and telephone.

In two schools only, extensive alterations of the space had been made to meet the needs of alternative users. In most cases, alterations were minor, e.g. extra wiring for typewriters, fire doors, sinks.

Contacts between users and school children are mostly minimal, although in a few cases handicapped children share activities and/or certain classes with the other children. Staffs of both the outside agency and the school very often share the same staffroom.

The role of the principal with respect to the alternative users varies from school to school. In most cases his contact with the users is on an informal basis. A few situations may require a small amount of administration, e.g. timetabling the use of facilities or dealing with registration for adult day classes. Most principals like to be aware of what is happening in the school and visit the users from time to time.

Problems of Alternative Daytime Use

More than half of the principals interviewed stated that there were no problems connected with alternative daytime use; the others had few complaints, mainly of a minor nature.

Some problems were peculiar to the type of use; others arose regardless of the type of use. Almost all the principals mentioned some slight disruption in the school office when the user did not have a phone. There were inevitable inquiries regarding the users which school secretaries could not answer. Obviously, separate phones are an advantage; but if that cannot be arranged the school office staff should be supplied with some basic information about the available services.

A few principals said there was a slight problem with noise, which might be resolved by the use of separate doors and/or rearranged schedules. One principal had limited the users to a certain area; in another case the principal moved the users to a room close to an entrance so that there was no traffic through the school corridors.

Some principals expressed concern about the safety of the children with extra traffic in the school yard, and one had requested a gate to control access.

Adult day classes create unique problems. School staff very often deal with the registration of adult students, thus increasing their own work load at the beginning of terms. Some boards have helped this situation by having registration at the board office. Most concern expressed was over smoking on the school premises. In most cases it is banned completely by the board, but one principal permitted the adult students to smoke in the staffroom.

Two principals expressed anxiety regarding fire drill. One felt that the users would have to be hooked into the school P.A. system. In one of the high schools which housed day care, the principal pointed out that the little children had to be watched carefully during evacuation.

Two principals had more serious criticisms of alternative daytime use. Supplies were being stolen from the school, and daytime users with access in the evenings were leaving doors open, with the result that unauthorized people came on the school premises.

Advantages of Alternative Daytime Use

The majority of principals felt that the advantages of alternative use to the school far outweighed the disadvantages. The most usual comment was that parents are encouraged to visit the school, become more involved with school activities, and feel more relaxed in the school. Wider use is beneficial for the students inasmuch as they learn to mix with children of different age groups and with children with problems. In some cases it means that experts (e.g. psychologists) are readily available to deal with the problems of the regular school population, or to help parents of the school children (e.g. with immigrant services). Some principals said that the presence of a day-care centre in the school boosts enrolment, since it encourages parents of the children in day-care to send them to the same school rather than to another one in the area. Two principals felt that alternative use was helping to keep the schools open.

The principals also thought that alternative use was good for public relations; residents are pleased that the vacant space is not being wasted. Some alternative use, especially day-care and ESL classes, serves the needs of the community, and classes which train people in a particular skill are welcomed. However, this study showed that in many cases agencies located in schools serve people from a much wider geographic area than the immediate school neighbourhood, and it is debatable whether community needs are being served quite as extensively as principals suggest.

At the board level alternative use is encouraged mainly because it contributes to good community relations. Boards do not make a profit; indeed it may cost money to maintain such use.

The users interviewed were unanimous in their approval of the space and facilities provided in the schools. The case studies described in the Appendix provide more detailed information concerning 12 of the schools studied.

Leasing Arrangements

Leasing of surplus classroom space is subject to Ministry regulations. Because boards receive grants from the Ministry toward construction and operation of school facilities, they are subject to negative grants where the facilities are used for non-school purposes. This occurs when facilities are leased for non-educational uses regardless of whether the board receives actual revenue. The regulation provides for the negative grant to be waived where:

1. The school continues to be administered by a principal.

2. The space is not altered and the lease is for a maximum of one year

   or

3. The lessee is an organization incorporated under Part III of The Corporations Act, Ontario, or is acceptable to the Minister.

4. The lessee pays the board a rental charge to cover only the operating costs of the space leased.

If a board alters the space to suit the lessee, these charges are not eligible for grant purposes. If the tenant pays the board for making the alterations, there is no reduction in the grant on recognized extraordinary expenditure. When a lease expires, and is not renewed, any cost to restore the space to its original use or a new use is not eligible for grant purposes.

In applications to waive the negative grant, if the ratio of enrolment to rated capacity is less than 60%, the Ministry requires from other school boards that may have an interest in using the vacant space a statement about such interest. This ensures that educational users have first access to vacant space.

All boards have some kind of written agreement with alternative users. This may take the form of a letter of agreement, but in the majority of cases formal leases are used. If the terms are arranged through a board's permit system, Ministry regulations do not apply.

The amount charged varies depending on the type of use, the user's source of funding (public or private), and the board's disposition. At least one board consults with local real-estate companies to determine appropriate fees. Some boards charge an amount per square foot per year (approximately $1.65); others charge between $14 and $25 per classroom per week. Provision may be made for escalation based on annual overall board maintenance and plant operation costs. One board allows free occasional use by community groups; another charges cooperative nurseries no fee because they are considered a substitute for junior kindergartens. The condition of the school building may also affect the fee charged. All alternative users located in this study were non-profit-making agencies.

Hours of use tend to be flexible; one board has an automatic clause in its lease permitting use from 8:00 a.m. until 11:00 p.m.

Boards usually permit daytime users to extend their hours into the evening, although one board does discourage this.

Normally users are not charged extra for evening use but some boards charge for caretaking if required during school vacations. However, one board gives users a discount if the space is not occupied during vacations.

Application Process

Generally, an application is made for space in a specific school, chosen by the potential tenant on the basis of location and suitability of the space for his needs, which will state the desired type of use. Where the applicant does not request a particular school, the board will suggest appropriate accommodation. Boards may voluntarily offer vacant space to compatible agencies such as the Ministry of Community and Social Services.

In two of the boards examined, the planning department deals with applications for alternative use. The chief planner selects appropriate space for the user and consults with the principal. When agreement is reached among the parties, a recommendation is sent to the appropriate board committee and/or to the board for ratification.

Three boards process applications through the business office. Normally business officials check with the appropriate superintendent who in turn approaches the principal at the prospective school. In one case schools have consultative committees, comprised of teachers, parents, and trustees, which may examine the application of the alternative user and made recommendations to the board.

Another board has a policy which states that when a school has a defined number of vacant classrooms an alternative-use committee must be struck, including representatives from school and community, to make recommendations as to the use of the vacant space. However, potential users may apply directly to an alternative-use coordinator who approaches the area superintendent, who then consults with the principal.

Principals are almost always permitted to comment on the suitability of the prospective tenants and in some cases have great influence in deciding which users are acceptable in their schools. A principal may also consult with his staff but generally teachers have limited input into the decision-making process.

Zoning by-laws do not seem to create problems with regard to alternative use. Boards are aware of the need to check zoning regulations before selecting space for an outside agency. At least two boards have worked with local municipal governments to effect changes in by-laws governing day-care, so that these agencies can now be located easily in schools.

Tenants are required to comply with fire-marshal regulations. Boards may advise the user in this matter and may inspect necessary alterations when they are completed.

As the final step in the application process, a board requests the Ministry to waive the negative grant on revenue from the leased property.

One board indicated that the complete processing of an application takes approximately three months.

Conclusions

This study shows that alternative day-time use of schools is very successful. Where problems do exist, they tend to be minor and are usually resolved by cooperation between school and user.

The most satisfactory arrangements were found where the users had separate entrances and their own telephone, and operated on a different time schedule from the school.

Informal mingling of users and the regular school population is regarded as beneficial. Principals who made certain rules clear to the user at the beginning, such as which facilities could be used and when, where users should park, and what areas of the school were permitted for use, claimed that such prior agreements helped avoid friction.

Positive attitudes on the part of the principal, teachers, office staff, and user are the keystones to successful alternative use.

Since the amount of vacant space will continue to increase for several years, boards are considering other possible uses. One high school is currently conducting a survey as to the needs of the community and hopes to set aside the school's ground floor for community use.

Comments on Chapter Four

Alternative day-time use seems to be an urban phenomenon. It is difficult to use a school to which a substantial percentage of students is transported for other community uses - the community is too spread out. My feeling is that in many cases there is a basic contradiction between the need for community use of schools and space made available by declining enrolment. Often enrolment is declining because the community itself is declining because of re-zoning to commercial or industrial usage or encroachment of highway, railway, or airport construction. Sometimes the enrolment in a public school is declining because of a move to a separate school in the same community. It seems strange that the public school supporters alone should be responsible for the community-service needs of a community which may be composed predominantly of separate school supporters. Costs of such programs should be met either by the secondary panel of the board or by the municipal authorities. If the situation were reversed, and it was the separate school that was declining and being used for community use, it would be crystal-clear that the local costs should not be borne by the separate school rate-payers alone but should be charged to the municipal authorities. This assumes, of course, that community use in such cases is not restricted to separate-school supporters.

Another problem with the community schools concept in the context of declining enrolment is that often the greatest need for community-school services (day-care centres, nursery schools, etc.) is in neighbourhoods where there is no declining enrolment. The use of vacant space for this purpose, then, is often the filling of a need after its period of greatest urgency is past.

But as we approach a period when perhaps nearly all schools will have vacant space, and when senior citizens outnumber children, the use of vacant space for activities of senior citizens could become of great importance. The recent notion of having senior citizens participate in the running of nursery schools and/or day-care centres to the benefit of both the old and the young warrants serious consideration in situations of declining enrolment. If this is done, perhaps some of the concern about having almost complete segregation of the alternate users from the rest of the school should be reconsidered.

It has recently been stated that Statistics Canada figures for 1971 show that 37% of the out-of-school population 15 years of age and over are functionally illiterate, i.e. have completed less than grade 9. A more recent publication puts the figure now at 25-26%. There could be a big future for schools as community continuing-education centres. This could occur even in rural areas with adults travelling on school buses and perhaps assuming some supervisory duties thereon.

One of the first earmarks of declining enrolment in U.S. jurisdictions has been declining pupil-teacher ratios. This has particularly come about in systems that had been plagued by rapid growth in school population coupled with voter resistance to increased accommodation. Overcrowded schools are almost by definition schools in which the PTR is high. But Ontario was able, during the time its elementary enrolment was growing from 4.1% to 13.9% a year (1961-1970), to increase its teaching force by a higher percentage each of those years, thus reducing the PTR from 30.5 to 24.7 in the 9-year period. For secondary schools, while enrolments were increasing at from 1.8% to 3.7% a year (1962-1969) the number of teachers was increasing by a higher percentage in each of those years, which resulted in a decline in PTR from 22.2 to 16.4 in the 7-year period. Charts A and B show the changes (between 1956 and 1975) in elementary and secondary percentage changes in pupils and teachers. This achievement makes it more difficult to decrease pupil-teacher ratios as enrolment declines, which, according to the preliminary survey reported on in this chapter, 50% of the responding boards had been using. Chart A shows that, since 1970, when overall elementary school enrolment began to fall, there have been only two years (1971 and 1973) when the number of teachers decreased at a higher rate than did pupils, thus increasing PTR. This continued drop in elementary PTR in the face of declining enrolment has been caused by provincial policy with respect to the general legislative grants: ever since 1969 the per-pupil ceilings for elementary schools have increased annually at a higher rate than have those for secondary schools, and in 1974, 75, and 76 an additional $80 per pupil was recognized in order to decrease the elementary PTR.

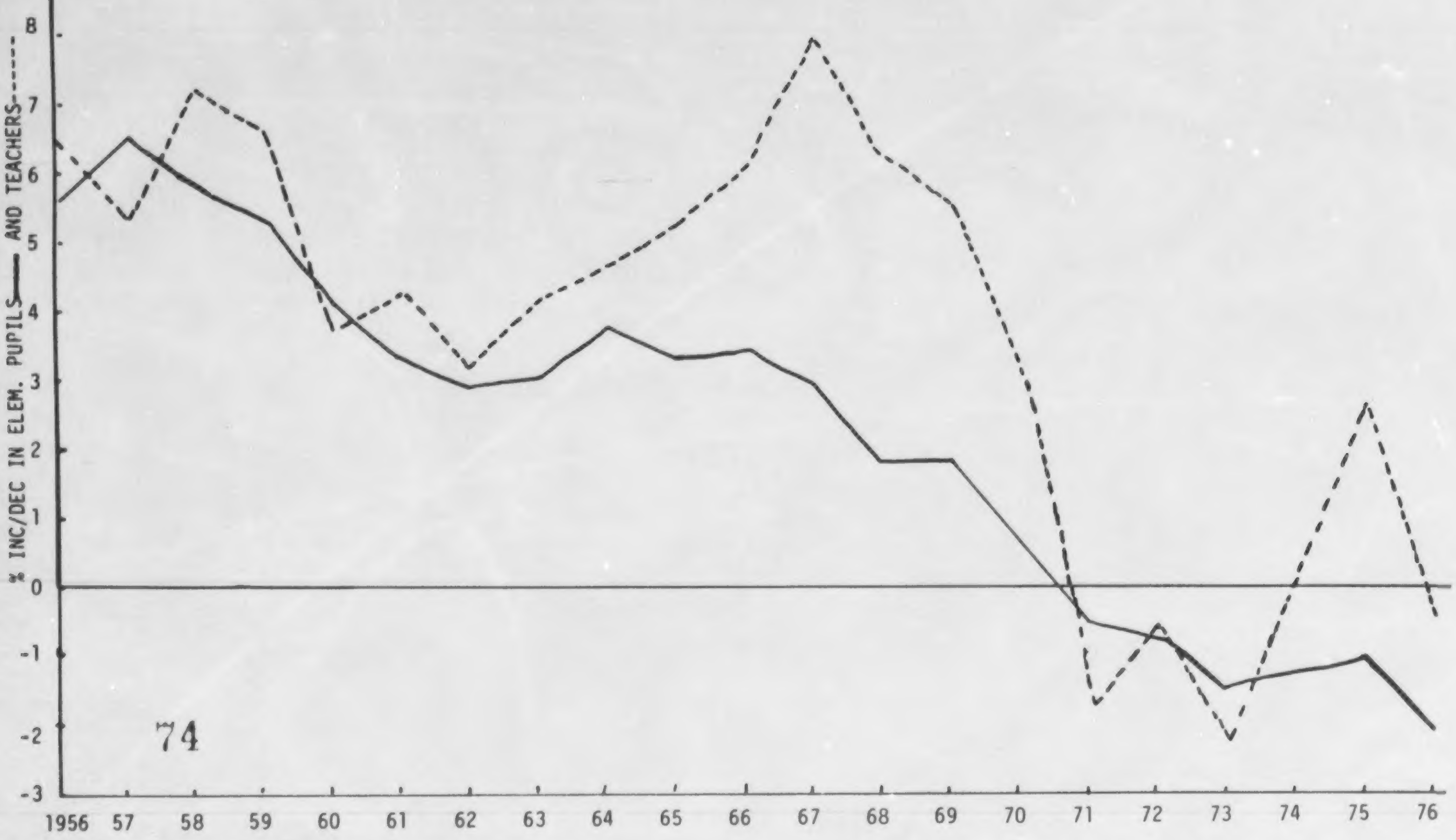
It will be noted from Chart B that every year but two since 1969 the number of teachers has grown at a slower rate than the number of students (and in those two cases the two percentages were almost the same), thus inducing a period of increasing PTR's.

Thus it will be much more difficult for secondary school boards to continue to reduce PTR as enrolment begins to decline. This will mean that the decline will have a more immediate and more

CHART A

20-year percentage increases

in Elementary Pupils & Teachers



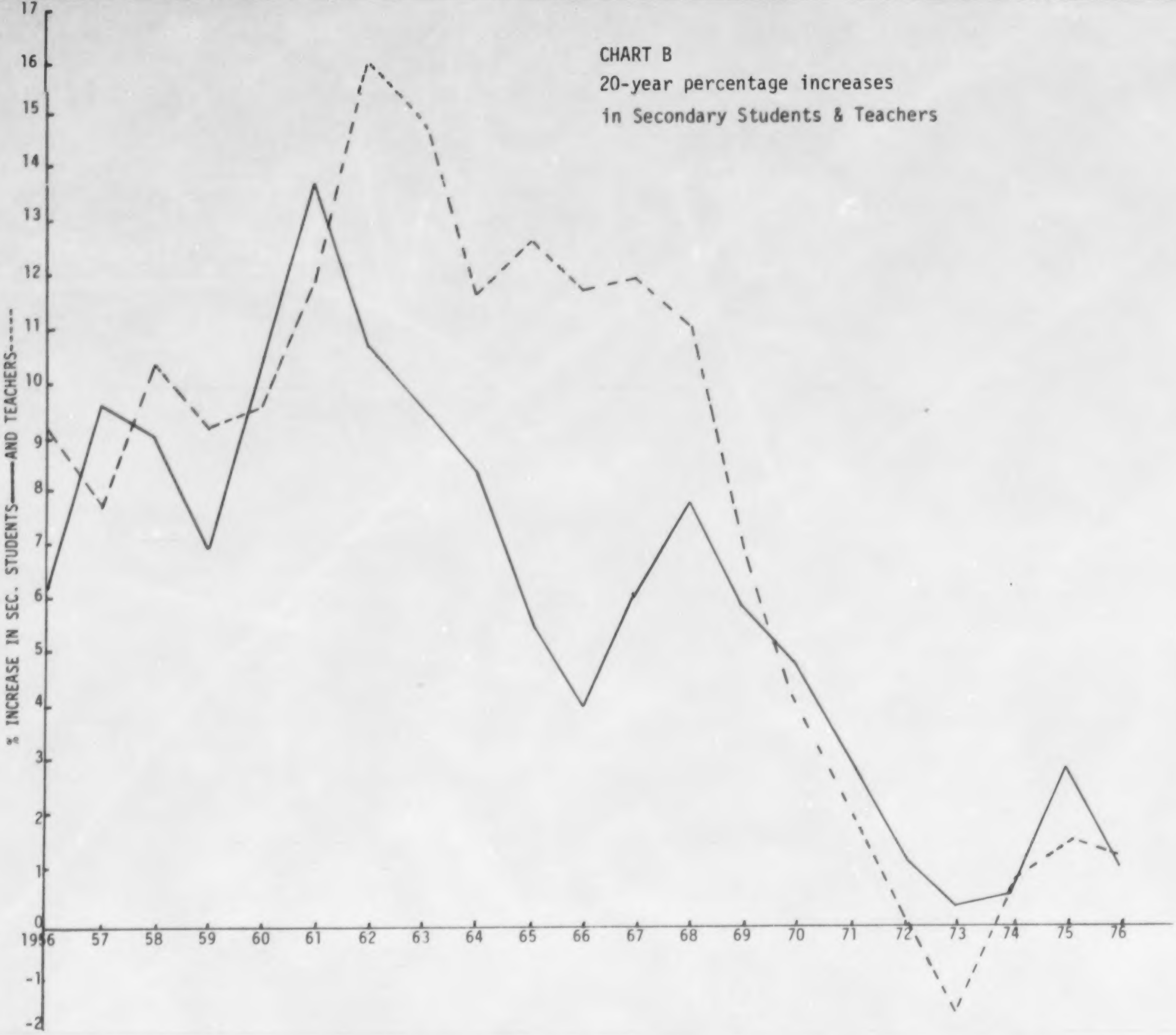


CHART B
20-year percentage increases
in Secondary Students & Teachers

76

77

serious effect on teacher hirings for secondary schools than it has had for elementary schools.

A final comment - it would seem easier to use vacant space in secondary schools for adult classes than it is to use such space in elementary schools. Such use by community members who do not have children in school will help to off-set one of the serious consequences of declining enrolment - the loss of constituency - by involving a larger segment of the ultimate taxpayers in the benefits to be derived from schools.

REPORT #II Abstract of Reports of Committee on Costs of Education in Ontario

by E. Brock Rideout

Report #2

E.B. Rideout

Comments on Findings and Recommendations of the Interim Reports of the Committee on the Costs of Education

Part 1

Interim Report Number One

This report, entitled Report on the Education of Elementary and Secondary Teachers in Ontario: Facilities, Organization, Administration, impinged on the problem of declining enrolments in that, through an examination of enrolment trends and predictions in both elementary/secondary schools and teacher-training institutions, it recognized that the impending decline in school enrolments would decrease the need for newly-trained teachers for a considerable period of time.

It recommended the closing of four teachers' colleges (Stratford, Peterborough, Ottawa and Hamilton) and the integration of four others with university faculties of education (London, Toronto, North Bay, and Sudbury). Three of the teachers' colleges for which closure was recommended have since been closed (only Hamilton remains open) and three of the recommended integrations took place. Toronto remains unaffiliated with a university.

The report showed that enrolments in elementary teacher education institutions reached their high point in 1968-69 when there were 9,277 students enrolled in the 13 institutions. Enrolment had dropped drastically to 4,250 only 3 years later in 1971-72. On the other hand, at the time the report was prepared, enrolment at teacher education institutions for secondary teachers had reached its peak of 3,197 in 1971-72 the last year for which data were available.

The report estimated an excess of 2,175 elementary places in existing teacher-training institutions for the seventies. On the other hand it found that facilities for training secondary teachers in colleges and faculties of education were being utilized almost to capacity.

There were some additional recommendations that could have saved the government money and contributed somewhat to a lessening of demand for places in teacher-education institutions. Thus it was recommended that (1) regular student fees be charged in all teacher education institutions, (2) payment to students in the teacher-education institutions for room and board and travel during weeks of practice teaching be discontinued, and (3) the bursary of $500 paid to each student who enrols in a teacher-education program in a university be discontinued.

Other recommendations which would decrease the responsibilities and financial involvement of local school boards and the Ministry of Education would have (1) greatly reduced the Teacher Education Branch of the Ministry, (2) phased out winter courses for teachers conducted by local school boards and (3) transferred to teacher education institutions responsibility for the remaining summer courses for teachers conducted by the Ministry of Education.

Comments on Interim Report Number One

The matters with which this report deals are somewhat peripheral to the main thrust of my concerns in reviewing these reports - i.e. the financial implications of declining enrolment. Certainly the closing of three teachers' colleges and the integration of three others with universities has decreased the financial burden of the Ministry of Education - some of it at the expense of the Ministry of Colleges and Universities. But one must assume, given the funding methods applicable to the universities, that per-student unit costs of teacher education will be substantially less under the present system than they would have been had the changes not been made. There is little doubt that if the other recommendations of the report were implemented there would be a further saving of public monies. If fewer persons enrolled in teacher-education institutions because of the renewal of the fee subsidy, the saving would be greatly compounded.

The report was accurate within less than one-half of one percent in the projections of elementary school enrolment for each of the years 1972 through 1976 (see Table 1), but was less successful in its projections of employed elementary teachers - for 1972, 73 and 74 these estimates were within one percent of the numbers actually employed, but for 1975 and 1976, the report projected respectively 4.48% and 5.6% more teachers than were actually employed in those years - a difference of 2,605 and 3,240 teachers respectively. This indicates the difficulty of projecting teacher need even when very accurate projections of enrolment are made. The problem, of course, is changes in the PTR. In 1975 and 1976 provincial grant policy encouraged a lowering of PTR in the elementary schools through the device of increasing the grant ceiling by more than was justified by inflation, the increase in average teacher experience and the upgrading of teacher qualifications. A more serious prediction error was that relating to the number of teacher withdrawals. For each of the years 1971 through 1975 the report overestimated the number of withdrawals by from 9% (1972) to 18.6% (1975). The researchers apparently failed to realize that as jobs became scarcer, fewer people will withdraw from teaching. (They will no longer be sanguine as to their chance of reentering the teaching force at a later date.) Because of the error in predicting withdrawals, there was a corresponding error in predicting teacher acquisitions. This was not uniformly an overestimation, however; for 1974, the first year in which extra funds were made available for elementary schools, the report's estimate was only 83.6% of the actual number of acquisitions. If we assume that the projections for the remaining years to 1981 are similarly in error, the prediction as to numbers of elementary teacher-education graduates required in these years will be considerably inaccurate. This will have some implications for making provision for teacher-education institutions.

Projections for the elementary schools can be much more accurate than those for the secondary schools because in the former case we are dealing with children in the compulsory-school-attendance age range.

Variation comes about only through changes in immigration, emigration and net in- and out-migration between Ontario and other provinces of Canada. The much greater difficulty of projecting for secondary schools is well illustrated in the report. Table II compares the projected figures for 1971-76 for students, teachers, and withdrawals and acquisitions of the latter with what actually happened in those years. One notes immediately the much less accurate predictions of secondary school enrolments - an over-estimation of between 5 and 6 percent in each of 1974, 75, and 76 and of 3.8% in 1973. Only in 1972, the first year of estimations, was the estimate as low as 1.5% too high. The magnitude of this error may be seen by looking at the projected and actual increases in enrolment (a good measure of the need for additional teachers). For the year in which the report was written it was estimated that enrolment would increase by 17,503 while it increased by only

Table I

Projected and Actual Elementary-School Enrolments, Teachers, Teacher Withdrawals and Teacher Acquisitions 1971-1972-1976

	Enrolment			Teachers			Teacher Withdrawals			Teacher Acquisitions		
Year	CCE[a]	Actual[b]	%[d]	CCE[a]	Actual[c]	%[d]	CCE[a]	Actual[c]	%[d]	CCE[a]	Actual[c]	%[d]
1971							8,378	7,417	113.0	7,866	7,079	111.1
1972	1,444,032	1,445,101	99.9	57,817	57,911	99.8	8,297	7,569	109.0	7,598	6,208	122.4
1973	1,426,577	1,422,885	100.3	57,118	56,630	100.9	8,186	7,375	111.0	7,496	7,423	100.9
1974	1,409,350	1,404,839	100.3	56,428	56,678	99.6	8,076	7,141	113.1	7,210	8,630	83.6
1975	1,387,715	1,389,478	99.9	55,562	58,167	95.5	7,939	6,697	118.6	6,944	6,337	109.6
1976	1,362,864	1,360,085	100.2									

a From Table 2, Interim Report Number One, Committee on the Costs of Education (CCE)
b From Table 4.14(b), Education Statistics, 1976, Ministry of Education, Ontario
c From Table 5.01, Education Statistics, 1976, Ministry of Education, Ontario
d Projected as a percent of actual figures

8,493. The next year, 1973, it was projected that there would be an increase of 15,917 pupils over 1972; the actual increase was only 2,712!

The projections with respect to secondary teachers were even further out, ranging from an over-estimation of 2.8% in 1972 to one of 9.7% in 1975 - the over-estimation of enrolment was compounded by the assumption that the 1971 PTR would remain the same through 1975.

But a more serious error was the gross over-estimation of teacher withdrawals; these grew progressively from a 19.9% over-estimation in 1971 to one of 88.6% in 1975. Similarly large, though more erratic, errors were made in the projections of teacher acquisitions - an almost unbelievable 117.8% over-estimation for 1972 with over-estimations of from 48.3% for 1971 to 69% for 1975 for the remaining years. With margins of error in prediction of this magnitude, one must be very careful about predictions of need for secondary teachers between now and 1990. There are too many variables at work in the secondary-education field.

Table II

Projected and Actual Secondary-School Enrolments, Teachers, Teacher Withdrawals and Teacher Acquisitions 1971-1972-1976

Year	Enrolment			Teachers			Teacher Withdrawals			Teacher Acquisitions		
	CCE[a]	Actual[b]	%[d]	CCE[a]	Actual[c]	%[d]	CCE[a]	Actual[c]	%[d]	CCE[a]	Actual[c]	%[d]
1971							3,924	3,273	119.9	4,973	3,353	148.3
1972	592,023	583,013	101.5	35,518	34,549	102.8	4,054	2,960	137.0	5,009	2,300	217.8
1973	607,940	585,725	103.8	36,473	33,889	107.6	4,172	2,781	150.0	5,156	3,123	165.1
1974	624,332	589,650	105.9	37,457	34,231	109.4	4,293	2,555	168.0	5,036	3,150	159.9
1975	636,718	605,160	105.2	38,200	34,826	109.7	4,385	2,325	188.6	4,818	2,851	169.0
1976	643,932	613,055	105.0	------	------	-----	-----	-----	-----	-----	-----	-----

[a] From Table 4, Interim Report Number One, Committee on the Costs of Education (CCE)

[b] From Table 4.15(b), Education Statistics, 1976, Ministry of Education

[c] From Table 5.01, Education Statistics, 1976, Ministry of Education

[d] Projected as a percent of actual figures

Part 2

Interim Report Number Two

This report is entitled School Building Programs. It's main concerns seem to be:

(1) To provide for complete provincial control of new school construction;

(2) To drastically reduce the amount of new construction in conformity with the observed and expected decline in enrolments;

(3) To simplify and make more equitable the formulas under which approvals are granted and on which provincial support is based for school buildings;

(4) To require boards to make long-range forecasts of needs for new accommodation and to justify those needs in the light of total accommodation available in both the public- and separate-school systems locally;

(5) To shift the entire burden of future new school-construction costs away from the local taxpayers and on to the Province, while making the boards entirely responsible for financing the purchase of school sites; and

(6) To restrict the powers of boards to make capital expenditures out of current revenue by reducing by 50% the legal limits on such expenditures at present in the law.

For the most part the recommendations of this report have not been acted upon, although there has been a considerable tightening of provincial controls on school building. Column 1 of the following tabulation shows the total cost of school construction (elementary and secondary) that would have been authorized had the Committee's recommendation of $50,000,000 per annum in 1972 constant

Comparison of Expenditures in 1972 Constant Dollars on New Construction for Elementary and Secondary Schools With That Proposed by the Committee

Year	Column 1 CCE Rec.	Column 2 Actually Spent	% col. 2 is above col. 1
1973	53,769,000	129,319,000	141
1974	59,637,000	93,502,000	57
1975	66,078,000	125,137,000	89
1976	71,040,000	108,307,000	52

dollars been implemented. Column 2 shows the dollar value of the school buildings actually constructed, and Column 3 shows the percent by which the amount authorized in each of 1973, 74, 75 and 76 exceeded the Committee's recommendations.

It will be noted that, while in 1973 the value of construction was 141% above that recommended, by 1976 it was only 52% above. It is probable that by 1978 it is much closer to the Committee recommendation. The Committee was probably unrealistic in demanding an immediate drop to the $50,000,000 level but its bold recommendation did focus public attention on the need to be conscious of the rapidly decreasing need for new accommodation. The report pointed out that from 1945 to 1971 school boards had provided 1,463,251 new school places at the elementary level and that the elementary enrolment in 1971 (the peak year) was 1,456,840 pupils. For secondary students 550,480 places had been provided for a 1971 secondary-school enrolment of 574,520. Thus more than enough new accommodation has been provided since 1945 to house all elementary students in the system.

The Committee recommended that approval be granted for new building only after real need had been proved after taking into consideration not only the new pupils and existing accommodation in the attendance area but also the total accommodation available in the board's jurisdiction and in any coterminous jurisdiction. This recommendation has been the one most nearly implemented.

The rest of the recommendations relate only peripherally to the problem of declining enrolments.

Part 3

Interim Report Number Three

This report is entitled Pupil Transportation. Its major recommendations are:

(1) that all contracts for transporting pupils be awarded only after tenders have been called for;

(2) that the Ministry, in consultation with school boards, gather numberical and other data about transportation services, compile and analyse them and make the results for each board known to all boards and the general public;

(3) that Ministry-supported research be carried out into the educational advantages and disadvantages of the "half-day-every day -kindergarten and the "alternate full-day" kindergarten;

(4) that the Ministry pay 100% of the approved expenditures for essential regular transportation between home and school and between school and school; and

(5) that the Ministry recognize for grant purposes only those approved expenditures required to provide essential transportation, defined as services for pupils under ten years of age who live more than one mile from schools, and for pupils over ten years of age who live more than two miles from school.

Most of these recommendations are designed to decrease the cost of transporting pupils borne by provincial taxpayers. They are very pertinent in the context of the energy crisis - less so from the standpoint of declining enrolment. The following comments may be made with respect to these recommendations as they apply to declining enrolment.

A rather remarkable fact of the past 16 years is the relative stability in terms of constant (1971) dollars of the cost of regular

Cost per Transported Pupil in Constant (1971) Dollars for Regular Home-School Transportation

School Year	Annual Cost Per Transported Pupil	
	Current $	Constant $
1960-61	85.59	114.12
1961-62	82.31	108.44
1962-63	76.90	99.61
1963-64	77.17	98.18
1964-65	79.11	98.27
1965-66	77.96	93.36
1966-67	79.04	91.38
1967-68	80.98	89.98
1968-69	84.18	89.46
1969-70	87.20	89.71
1970-71	92.43	92.43
1971-72	87.83	90.67
1972-73	111.52	98.95
1973-74	117.53	94.02
1974-75	141.75	102.35
1975-76	168.45	113.13

****

home/school pupil transportation per pupil transported. The above tabulation shows the cost of such transportation in current and constant dollars per transported pupil for each year from 1960-61 to 1975-76.

It will be noted that in constant dollars, the cost per transported elementary pupil in 1975-76 was $1.00 less than in 1960-61. Between those two years there was a fairly steady decrease in cost per transported pupil until the low point of $89.46 was reached in 1968-69. One might speculate that this decline was caused by the declining enrolment in rural Ontario which gave impetus to the movement to form larger units of administration and central schools. Basically, the decline probably relates to the economies of scale resulting from the great increase in numbers of pupils transported, particularly those transported less than two miles. Unit costs in constant dollars have been rising since 1968-69 but more erratically than they fell previously. These rises have occurred despite continued increases in the number of pupils transported. The increases in recent years have, of course, been greatly influenced by the increases in the cost of fuel, the price of which has advanced more rapidly than the consumer price index.

The great increases in the total cost of transportation, then, over the 16-year period must be attributed to two other factors: (1) inflation and (2) a great increase in the number of pupils transported.

What might we expect the result of declining enrolment to be on the cost of transporting pupils? In rural Ontario, where transportation routes are already in existence, we would expect that the total cost of transportation would not be materially increased and certainly not materially decreased as a result of declining enrolment. But the existence of fewer children per route will inevitably increase the unit cost of pupil transportation. There would be some increase in total cost in situations where small central schools become too small to be effective and transportation over greater distances is inaugurated. One would expect great community opposition to such moves, however, in view of the "small is beautiful" movement in general, and the evidence that small schools are not as bad as was once thought in particular.[1] The chief argument against small rural schools during the decades of the forties, fifties and sixties was the inability to get capable teachers to serve in such schools. This will not be a problem in the years to come as it was not in the thirties, the last period when there was a surplus of teachers.

In urban centres, on the other hand, one might expect an increase in the number and percentage of children transported to school and hence an increase in the total cost of transportation in urban Ontario. This would come about if the present trend to close some small schools and transport their pupils to other schools to keep the latter of viable size continued. Such transportation of pupils will usually be for distances that fall below those recommended by the Committee as reported in (5) above. Transportation in built-up areas is usually not as much related to distance as it is to the necessity for small children to (a) cross busy through-streets or railway tracks, or (b) travel along busy roads or streets that do not have proper sidewalks.

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[1] See J.P. Sher and Rachel B. Tompkins. Economy, Efficiency and Equality: The Myths of Rural School and District Consolidation, National Institute of Education, USDHEW, Washington, 1976.

It seems to me that the whole question of small schools to which children can walk safely, and that can serve as community schools versus so-called viable schools to which pupils need to be bused, will become an important one. If energy costs continue to rise, I suggest that the decision will tend to be made more and more often in favour of the smaller school. This has implications for provincial grant policy. If the decision is to discourage increases in busing by instituting minimum busing limits as suggested by the report, then the small-school weighting factor should be made applicable to urban as well as rural schools. Conversely, if the higher cost per pupil of operating small urban schools is not recognized, then busing in such circumstances should be supported by the Province where safety reasons as well as distance reasons warrant it.

If the recommendation to have the Province pay all of the approved cost of essential transportation is implemented, this would entail Provincial approval of transportation for safety reasons.

Part 4

Interim Report Number Four

This report is in two parts: I. Planning and II. Demographic Influences on School Enrolment.

Part II does not contain any recommendations. It is a good analysis of all aspects of the demographic situation in Ontario. It will be looked at by those dealing with future demographic trends and will not be discussed here, where financial implications of declining enrolment are the main concern.

Part I recommends a much greater commitment to provincial and local planning for education than obtains at present. The report has obviously been influenced greatly by the program budgeting - PPBS --ERAS (Educational Resources Allocation Systems) movement. Were the recommendations to be followed, the Department of Educational Planning at OISE would receive a great boost both from the standpoint of increased students and that of a more long-term research commitment by the Ministry.

This report does not seem to have any first-order implications for the financing of education in a period of declining enrolment. The recommendations seem realistic and warranted, particularly in a period of declining enrolment when planning mistakes tend to become aggravated by decline whereas such mistakes are short-lived in a period of growth. For that reason alone the recommendations in this report would seem to deserve support.

Part 5

Interim Report Number Five

This report is entitled Educational Agencies and Programs and is of very little relevance to the topic of declining enrolments. It deals with the following 11 topics: The Ministry of Education; The Ontario Educational Communications Authority; The Ontario Institute for Studies in Education; The Metropolitan Toronto School Board; School Boards; Grade 13; the School Year; the Teachers' Superannuation Fund; Correspondence Courses; Private Schools; and Trustee Allowances. Most of the recommendations concerning these topics would serve to decrease government expenditure on education. An exception is the recommendation relating to OISE, a recommendation that is not being followed. Major recommendations include:

(1) Funding OISE for research and planning activities;
(2) Gradual elimination of the correspondence courses branch of the Ministry;
(3) Removal of inspections of and authorization of Secondary School Graduation Diplomas for private schools;
(4) Appointment of commission to study the OECA;
(5) Return of the decision as to number of teaching days in a school year to the Minister;
(6) A major research project to study all aspects of the operation of the divisional boards of education;
(7) Abolition of the Metropolitan Toronto School Board;
(8) Greater commitment to decentralization in the operation of the Ministry - with reduction in the Queen's Park staff;
(9) Removal of maximum trustee allowances from legislative and excluding such allowances from eligibility for legislative grants;
(10) Transfer of the employers' share of teachers' superannuation

payments from the Province to the school boards with a concomitant addition each year of the amount saved by the Province to the general legislative grants. Also that no additional benefits be granted;

(11) Careful consideration of all factors before abolishing Grade 13. (The report is favourable to its retention.)

I make the following comments of applicability to the problems of declining enrolment:

(a) A period of declining enrolment would seem not to be an apt time to discontinue Grade 13. That would make the problem of teacher unemployment greater, and, from the standpoint of cost, would result in higher unit costs for these students if they enrolled in either colleges or universities.

(b) The recommendation that additional benefits be made available for the Teachers' Superannuation Fund runs counter to any proposals that might be made with respect to further moves to encourage early retirement. On the other hand, such financial encouragement could be handled directly by the government with payments from the Consolidated Revenue as is done in the case of cost-of-living adjustments and minimum pensions for teachers already retired.

The recommendation concerning the dismantling of the Correspondence Courses Branch of the Ministry seems somewhat shortsighted in view of the possible expansion of need for such courses, particularly at the secondary level, as a direct result of declining enrolment. As already marginal high schools get smaller, there will be a need for correspondence courses, perhaps supervised by school staff, to provide specialized courses for which there are too few students to warrant providing a class. Without recourse to correspondence courses the program in such schools could be seriously weakened.

Part 6

Interim Report Number Six

This report is entitled Compensation in Elementary and Secondary Education, and as the title implies, deals with teachers' salaries. The report does not contain recommendations as such but comes down heavily in favour of use of the Principle of Fair Comparison in determining wage rates in the public education sector. The report and its findings have no obvious relationship to the problems of declining enrolment.

Part 7

Interim Report Number Seven

This report is entitled Financing Education in Elementary and Secondary Schools. Although the Committee consulted authorities in the United States and in other Canadian provinces it displays a woeful lack of knowledge concerning the Ontario grant system. This is hardly surprising since neither the School Finance Adviser of the Ministry or the outside consultant, the two persons most knowledgeable concerning the inner workings of the grant structure in Ontario, was asked to appear before the Committee to explain and discuss it.

The general solution recommended is simplistic and a great leap backward. It proposes that the Ministry establish "basic uniform expenditure levels" similar to those now in existence, but eliminate all recognition of differential educational need now provided for by weighting factors, and require all boards to levy a uniform mill rate on equalized assessment at full market value. The legislative grant would be the difference between the product of the basic uniform expenditure level and the number of students and the yield of the uniform mill rate. So far the only difference between the proposal and the plan existing at the time the report was prepared is the elimination of the weighting factors - many of which, in one form or another, have been in the grant structure for 35 years. The report assumes that $100 will buy the same education everywhere in Ontario, regardless of population sparsity, urban problems, concentrations of students needing high-cost special-education programs, small schools, technical and occupational courses and demonstrably higher costs for many goods and services in Northern Ontario.

It seemed entirely unaware that a uniform mill rate applied to equalized assessment with the Province picking the short-fall from a ceiling amount is exactly equivalent to the percentage equalizing grant up to the ceiling already in full use in Ontario since 1969. The latter is made obvious by the shift this year to the mill-rate equivalent instead of the former establishment of percentage rates of grant. The shift is not considered a major change but is rather a cosmetic change to emphasize the uniformity of local effort and decrease emphasis on the amount of grant per pupil.

But the unbelievable part of the report's recommendations is that part dealing with a board's ordinary expenditures above the basic uniform expenditure levels. The report recommends that such expenditures be limited - not in relation to demonstrated needs as was the case when expenditure ceilings were in place between 1971 and 1975, but in relation to a board's taxable assessment per pupil. Elementary boards would be permitted to spend above the ceiling by amounts not to exceed one mill on equalized assessment and secondary boards by amounts not to exceed one-half mill. For elementary boards this would mean that poor boards would have the local autonomy to spend some 8 or 10 dollars per pupil above the ceiling, while the richer boards would be able to spend $120 or more per pupil. Such a plan would be disastrous for (1) large urban boards, (2) separate school boards, (3) small boards, and (4) most northern boards.

Many of the other recommendations with respect to the grant structure are similarly unenlightened. But none of this is of great pertinence with respect to declining enrolment.

There was one specific recommendation, however, relating to declining enrolment. At the time the report was written, average daily attendance on which a board's ordinary expenditure recognized for grant was based was augmented by 60% of the decline in enrolment from one September to the next. This recognized the fact that all overhead and central-office costs could not be reduced proportionally in one year as enrolments fell. The report recommended the removal of this special assistance for boards with declining enrolments. The Regulation prescribing the General Legislative Grants for 1976 removed the provision for an adjustment for declining enrolment. By that time declining enrolment was becoming pretty general among public-school boards. There was a lobby on behalf of separate-school boards (which had not yet begun to decline) against the use of funds from a limited pool of provincial grant money to help boards with declining enrolments. It also became apparent that special help for boards with declining enrolment permitted the luxury of delaying staff adjustment that might otherwise have been forced. Also, as declining enrolment becomes universal the only boards that will need special help will be those that are declining more rapidly than some standard rate. This could be achieved through a weighting factor, preferably one similar to those provided for trainable retarded children and for grades 9 and 10 in an elementary school in the 1978 grant regulations.

It is interesting to note that a change in the regulation for 1978 removes a feature of the grant structure that cushioned to some extent the effect of declining enrolment during the calendar year. Prior to 1978 the enrolment used for purposes of determining the rate of grant was that of the previous September. The 1978 Regulation uses the 1978 ADE, which, based on actual enrolment at three points in the calendar year, reflects immediately any decline in enrolment.

The ADE used in the 1978 grant regulation to calculate a board's ordinary expenditure recognized for grant purposes is smaller than that recommended by the Committee on the Costs of Education. The latter would have used 60% of the 1977 September enrolment together with 40% of the 1978 September enrolment to determine the 1978 ADE. The Regulation uses 30% of the January enrolment, 30% of the April enrolment and 40% of the September enrolment. For a board whose enrolment is in decline, this will result in a smaller figure than that recommended by the Committee for two reasons: (1) the January enrolment will be less than the previous September enrolment and (2) a decline in enrolment between January and April will be reflected in the ADE as calculated by the 1978 Regulation but not in that calculated as proposed by the Committee.

One very simple way to build in some assistance for boards with large decreases in enrolment would be to base the year X grant on the year X-1 ADE. This would automatically give greater assistance to those boards whose rate of decline was steepest. It would result, however, under a system of a fixed pot of grant money, in either slightly lower per-pupil ceilings or slightly higher uniform mill rates for all boards. In addition it would penalize those few boards that are still growing. This could be avoided, however, by the simple device of calculating the grant on the greater of the present or preceding year's ADE.

REPORT #III Annotated Bibliography re Financial Aspect of Declining Enrolment

by JONATHAN YOUNG

Report #3

E.B. Rideout

Comments on Findings and Recommendations of the Interim Reports of the Committee on the Costs of Education

The Financial Implications of Declining Enrolments
(Review of Recent Literature)

Declining Enrolments as a "cost/revenue dilemma."

The basic problem identified by many authors is summarized by Brown (1975) as a "cost/revenue dilemma"; that many educational costs are fixed, at least in the short run, while state and federal revenues are closely related to pupil numbers (see also Doyle, 1977, and Goettel and others, 1976). This point is borne out by Neill, (1977) who quotes The National Center of Educational Statistics projections that pupil enrolments in the USA will decline by 15% between 1975 and 1985, while the total cost for all regular and private elementary and secondary schools will jump from $75 billion in 1975/6 to $101.4 billion in 1985/6 (at 1975/6 dollars to eliminate inflation). In his study of Illinois, Brown, (1975) estimates that of all educational expenditures 13% are fixed in the short run (take a year to adjust), 52% are fixed in the intermediate run (take two to five years to adjust), 13% are fixed in the long run (take six to ten years to adjust) and 22% are unaffected by changed in student enrolments and so are fixed for an indefinite period.

Declining Enrolments as "a loss of constituency."

The "euphoric boom" in education that characterized the 1950's and 1960's has been replaced by "melancholy depression" in the 1970's, according to Lauwery, (1972). Lucas, (1977) talks of a loss of faith in education, and Coleman, (1977) looks at the loss of a constituency as the numbers of voters with school-aged children declines. Mueller, (1977) emphasizes that these changes are the product of changes outside the education system and that educators must get motivated in the politics of education at the state level. Eisenberger, (1977) looks at the changes that have taken place in society in general as the result of an aging population, and the ways in which different industries have adapted to the changes in population structure. Drawing attention to the implications of these changes she concludes that in the years to come education's most serious problem may not be decline but neglect.

Dealing with Declining Enrolments: State Aid Policies.

Most states in the USA have some policy to help school districts with declining enrolments. Leppart and Routh, (1976) survey the different states. Leppart and Routh recognize four major types of state response which they call State Aid Guarantees, prior Year Student Counts, Multi-Year Averaging and Lost Student Percentage Guarantees. Atherton, (1977), in discussing methods of state funding, uses the terms "Slip-Year Financing" and "Base-Year Financing," and also advocates an approach based on Program Analysis rather than some variation of student numbers.

Goettel and Firestone, (1975) point out that those districts with the greatest declines suffer the worst. For the vast majority of states with equalizing aid formulas, local districts will be affected on the capacity side of state aid calculations as well as the distribution side, as a greater-than-average pupil decline will mean a greater than average increase in the local tax base per pupil, when other factors are held constant, giving the appearance of greater wealth. Doyle, (1977) also draws attention to the question of minorities being hit hard.

Dealing with Declining Enrolments: Expanding into new markets.

The decline in enrolments has led to the suggestion that educational institutions should reach out to new populations in order to avoid reductions in force. Adult education and pre-school populations have been the focus of most attention. Zusman and Weiner, (1977) look at the attempts of high schools and community colleges in California to expand into Adult Education.

Dealing with Declining Enrolments: Cutting back on expenditure.

Faced with declining revenues resulting from declining enrolments, many school boards have been forced to adjust their budgets. Since they make up the largest parts of the budget, salaries and facilities have come under the most scrutiny.

Reduction in Force.

Coleman, (1977) looks at the Canadian context and considers the legality of redundancies in different provinces. He advocates a policy of "worst out first" where redundancies are unavoidable rather than the present policy of "last in, first out" which he considers expensive, leading to poor education, and unfair to good young teachers.

Early Retirement Incentive Schemes.

Early retirement is seen as a way that boards can save money, by retiring staff at the top of their salary scales, reduce layoffs, and prevent stagnation in the profession. Cortines, (1973) outlines the Pasadena Early Retirement Incentive Scheme and King and others, (1977) outline a proposed program for Grand Valley State Colleges in which they examine the principles behind the scheme, eligibility, the option of phased retirement, pre-retirement counselling, and the financial implications both for the institution and the retiree.

School Closure.

Only when declines are sufficient to close a school are large reductions in expenditures on facilities likely, and then financial economies are likely to conflict with community interests. Dawson and Dancey, (1974), in considering Ontario schools and school boards in the public sector, found no significant relationship between school size and costs per pupil. Procedures for identifying potential savings from closures and case studies of such processes are provided by the Ottawa Board of Education, (1977) and the Calgary Board, (1976).

Dealing with Declining Enrolments: The need for planning.

Many authors stress the need for careful long term planning to meet the challenge of declining enrolments. This point is stressed by Doyle, (1977) and Lauwery, (1972). The Minnesota Association of School Administrators (1976) outlines a short and long technique of budget projection, and Keller, (1976), in his planning manual for New York State school districts, provides an important fiscal checklist in its appendix covering enrolment trends, staff/student ratios, expenditures on instruction, costs by area, and sources of income. Hentschke, (1977) outlines a somewhat similar model for budget planning which he sees as being useful for explaining to the public why costs are continuing to rise, as a basis for negotiations - to calculate the cost of any proposal, and as a way of calculating the costs of proposed changes in the educational system. Whitelock, (1972) stresses that in the area of planning, the State Education Agency has an important role to play. The need for long term planning is made more important by the projected upswing in enrolments that is expected to occur in the 1980's.

Who should control Education Funding.

The problems of declining enrolments and conflict between state and local educational funding has raised the question of who should fund education; local, federal, or state. This is an issue taken up by Shalala and Williams, (1976) and James, (1972).

A. Reports, Papers and Monographs

Atherton, Peter J. "Financing Education in a Time of Declining Enrolments." Paper presented to the Canadian Association for the Study of Educational Administration, Fredericton, June, 1977.

Declining enrolments are perceived as a problem primarily by the teaching profession, while to many of the general public it is a welcome opportunity to stabilize or reduce taxation for education. Two fundamental problems, teacher unemployment and program reduction, come together in the discussion of pupil/teacher ratios. Since available projections predict an increase during the 1980's, planning has to be with this in sight rather than for a wholesale dismantling of the system. Educational costs tend to be fixed in the short run, and with the system still feeling the effects of decisions, such as professional upgrading made in the 1960's, costs are still rising despite declining enrolments. Government support for education needs to adjust to this new situation. Slip-year financing and base-year financing can cushion the impact, but Program Analysis as the basis for government aid offers an approach which moves away from the pupil or teacher as the basic unit of funding and warrants serious consideration.

Brown, Howard E. Report of the Illinois Task Forces on Declining Enrolments in the Public Schools, Illinois, 1975.

The report covers the following aspects of declining enrolments: Projections, economics, staffing and programs. Running through all of it are several themes; the need for planning, community involvement, constraints and opportunities for making a better system. The cost/revenue dilemma - fixed costs in education and revenues tied closely to pupil numbers - is developed. Estimates for total school district expenditure for the year 1973/74 were made in terms of whether they were fixed in the short run (not subject to change in a year), in the intermediate run (2-5 years needed to adjust), or in the long run (6-10 years needed to adjust). Estimates showed that 13% of expenditures were fixed in the short run, 52% intermediate, 13% long run, and 22% unrelated to changes in student enrolments and therefore fixed for an indefinite period. These figures were used to illustrate the problem facing a school with declining enrolments over a period of years, and methods of cushioning these effects are outlined in terms of adjustments to the use of current pupil enrolments as the basis for state aid.

Calgary Board of Education. Declining Enrolments: What Impact on Our System. A Report Prepared for the Calgary Board of Education, Calgary, 1976.

Since 1970 increases in enrolments in the Calgary region have been minimal, and in the elementary system there has been considerable decline. In the fall of 1976 nine new schools were opened at an operating cost of $4 million. In order to pay for this it was necessary to consider consolidation of some of the schools with declining enrolments in line with existing Board policy. Criteria for considering closing a school, including percentage enrolment, teacher/pupil ratios, age and condition of the school, number of pupils and per pupil operating costs are outlined. Per pupil operating costs are prepared for schools considered for closing and compared to an average per pupil cost for the entire Board. Students from these schools are allocated to different schools in the area, and potential savings calculated.

Coleman, Peter. Shrinking Pains: Declining Enrolments, Fiscal Restraint, and Teacher Redundancies. Paper presented to the Canadian Association for the Study of Educational Administration, Fredericton, June, 1977.

The paper is based on the Manitoba experience of a 7% decline in pupils, a 6% increase in staff, and a greater than 100% increase in cost per student in the period 1970-76. In the face of these rising costs a declining enrolment means that fewer voters are parents of children of school age, and as the population ages, government spending priorities can be expected to shift away from education. The combination of declining enrolments and fiscal restraint focuses attention on staffing. The author examines the legality of redundancies in different provinces and argues for a policy of "worst out first," rather than the present "last in, first out," which he sees as expensive, leading to poor education, and unfair to good young teachers.

Cortines, Ramon C. "Early Retirement Incentive Schemes." Declining Enrolments: What To Do? AASA. Executive Handbook Series No. 2, Arlington, Virginia, 1974.

The article outlines the Pasadena Early Retirement Incentive Program designed to help solve the problem of declining enrolments and save the district money by those at maximum salary to retire early.

Ditzhazy, Helen E.R. The Principal and the Law: Suspensions and Reductions in Staff. Paper presented at the Annual Meeting of the National Association of Secondary School Principals in New Orleans, January, 1977, ERIC CODe. ED 137 987.

In the second half of the paper examination is made of the need to reduce staff when districts face declining enrolments, as well as the disposition of school buildings and school closing. Failure to recognize the problems associated with declining enrolments, the author maintains, could lead to the demise of the public school as an institution. Some methods for coping with enrolment declines are presented.

Doyle, Dennis P. "Policy Implications of Declining Enrolments." Testimony for the Subcommittee on Elementary, Secondary and Vocational Education of the House Committee on Education and Labour. Hon. Carl Perkins, Chairman. Foresight Hearing, May 10, 1977.

In summarizing the situation, the author observes that most state and federal education finance arrangements are sensitive to pupil counts. As enrolments dropped the public expected corresponding decreases in expenditures. This has not occurred and the slowness with which the expenditure curve declines is a major ingredient of the declining enrolment "problem."

Four fundamental strategies are outlined:

1. Contraction: the reduction of staff and the closure of plant.
2. Intensification and enrichment of services for existing students.
3. Extend services to previously unserviced populations.
4. A combination of the above.

Key problem areas are identified: The loss of teachers by attrition or layoff leads to increased expenses, puts a strain on retirement systems, and raises questions about the retention of gains made by women and minorities. Physical plant is seen as a key area of policy, closures often have important community effects and are made more difficult by school building design and by their legal and administrative status. A related question is their need in the projected upsurge in numbers sometime in the 1980's. Financial problems are seen as being aggravated by inflation and rapidly increasing energy costs, and being based in the fact that fixed costs are unrelated to enrolment shifts for a decade. Demographic problems arise from the fact that declines often go hand in hand with changing racial and social mixes.

In examining the mangement of decline - a situation creating new problems and requiring new administrative skills - the author points to the need to re-examine the nature and consequences of school size and the need for an accurate and extensive data base and relatively sophisticated analysis capacity. In suggesting tactics to meet the situation he looks at the concepts of Multi-Age Groupings and Year-round Schools.

Educational Facilities Laboratories. The Secondary School: Reduction, Renewal, and Real Estate, New York, E.F.L. 1976.

The report outlines the background to the present situation of below zero population growth in the USA. Emphasis is put on the need for long-term planning at a system-wide level.

In view of the potential turn-around in population trends towards the end of the 1980's the author outlines the possibility of considering the Junior High School as an "expansion-contraction" joint in the organizational structures of a school system; an idea he calls an "accordian concept."

The author looks at the ways in which decline can help to restructure the high school. He examines the use of surplus space for program development, the development of a more flexible option system, expansion of vocational education and special education, the attraction of new clientele, and community schools.

He concludes that while the numbers are now clear, what to do about them is not clear, but that the consequences can be positive and useful as schools respond to their changing world.

Goettel, Robert J. and others. The Imperative of Leadership, Vol. II, No. 1. A Report on Declining Enrolments, National Association of State Boards of Education, Denver, Colorado, 1976.

Problems created by declining enrolments are considered under the headings of Fiscal, Program, and Community Action. In the section on fiscal problems, the author states that "the major problem facing all districts with declining enrolments - indeed of any public or private enterprise caught in a period of retrenchment - is that costs cannot be reduced as rapidly as can the number of pupils served." Despite rising costs, fewer students mean less state aid, and those districts with the severest declines lose the most aid. These districts have fewer pupils eligible for aid, and in addition, because they look relatively wealthy since their property valuation per pupil is higher than similar districts with less decline, they lose out on additional state funds. Low tax base (low wealth) districts that receive the most aid under state equalizing formulas are the ones hurt most. Faced with this situation a district can attempt to either get more state aid, raise local taxes, or reduce services. The report surveys 21 states with special provisions in their school aid programs designed to cushion the impact of enrolment decline, of which only three have provisions aimed specifically at high enrolment decline districts (Michigan, Idaho, and California).

In offering suggestions as to what states can do to help local districts, the report emphasizes help in the collection and analysis of data and the technical aspects of planning. In addition, emphasis on districts with severe declines, encouraging early retirement and the setting and maintaining of standards are covered. A useful bibliography is provided.

Goetz, Frank and others. Facilities Study Report to the Board of Education. Birmingham Public Schools, Michigan, 1975, ERIC CODE: ED 135 094.

The purpose of the report was seen as answering the questions: "Do present facilities meet present needs and those for the foreseeable future?" and "Does the district have facilities additional to its needs for the foreseeable future?" In answering "yes" to the latter, alternatives were generated to deal with the excess classroom situation. Costs of $200,000 a year were estimated as potential savings from the closing of three schools.

Institute for Development of Educational Activities. Shrinking Schools. An I.D.E.A. Occasional Paper, Dayton, Ohio, 1975.

The paper summarizing a conference on the subject of declining enrolment provides a general overview of the problem, the seriousness of declines, the effect of the birth rate on enrolments, the importance of dealing with the issues at the school district level, and ways at getting at the problems. In looking for alternatives to deal with the situation of declining enrolments the report looks at an approach used by industry when faced with the same situation. It describes the way in which Johnson and Johnson Baby Products Company shifted its marketing focus from products for babies to "baby products for grown-ups." In a final chapter the paper looks at the approach used by Salt Lake City where school populations had declined from a high of 43,000 to 27,000 and where 24 schools had been closed. Two major approaches were described, using mid-year enrolments for staffing and program needs as the basis for decision-making.

Keller, William and others. Enrolment Trends: Programs for the Future. A Planning Guide for Districts with Declining Enrolments. New York State Education Department, Office of Research, Planning, and Evaluation, Albany, 1976. ERIC CODE: ED 132 736.

The document is designed to offer a guideline for those school districts in New York State faced with decisions related to declining enrolments. Chapters discuss analyzing programs, staff, facilities and education finance, as well as determining study strategies for enrolment declines.

In examining the fiscal impact of declining enrolments the report uses figures for 60 school districts in New York State, 20 which experienced the most decline in the year 1971/72, 20 that experienced the most growth in the same period, and 20 that were the most stable in terms of student enrolments. Comparison of operating expenses per pupil were used to indicate an important increase per pupil in districts with declining enrolments.

Appendix E provides an important fiscal checklist to provide a basis for pulling together a great deal of relevant information for educational decision making. Areas included cover the following aspects: "Who is the district serving - enrolment trends and follow-up steps," "How does the enrolment pattern become reflected in your staff/pupil ratios," "What does your district spend for instructional programs," "What are your costs in specific areas," "What areas are costing more, and how much more," "Where are the major resources coming from," and "How to examine revenue patterns."

King, Judith and others. The Faculty Salary and Budget Committee Report on Early Retirement, Grand Valley State Colleges, Michigan, February, 1977, ERIC CODE: ED 138 134.

At Grant Valley State College an early retirement plan for faculty was proposed as a contingency plan for potential enrolment shifts or declines. In this analysis, as a preliminary to implementation of such a program, a number of questions are considered in detail: principles on which the institution should base the plan; eligibility; the option of phased retirement (the Dartmout Plan); preretirement counselling; financial implications for the institution; and financial implications for the retiree.

A bibliography is included.

Leppert, Jack and Routh, Dorothy. An Analysis of State School Finance Systems as Related to Declining Enrolments, M.G.T. of America, Inc., Tallahassee, Florida, September, 1976.

The paper provides an overview of the 50 unique state finance systems and attempts to determine how school districts with declining enrolments will be affected by these state aid systems. Looking at the years 1970-1975, the report shows 37 states experienced declines in enrolment while 12 showed increases over the same period. In attempting to identify, categorize and summarize state funding formulas serving to ameliorate the adverse effects of declining enrolments, the report outlined four categories of state aid. Seven states used a system of State Aid Guarantees, which guaranteed that, regardless of enrolments, each district will receive, in a current year, an amount of basic state aid related to that which it received in a prior year.

Several states require the use of the student count of prior years as basic unit establishment mechanisms, while others provide for the optional use of prior year counts as a declining enrolment relief mechanism. A third technique used is that of Multi-Year Averaging of student enrolments, while five states use a Lost Student Percentage Guarantee, whereby some percentage of the number of lost students may be included in the count for the year of decline.

In looking at state funding mechanisms, the report identifies three approaches to determining the primary unit funded: the Student, or Weighted Student Approach; using the Teacher as the primary unit, having legally defined the Teacher/Pupil ratio; and using the Classroom as the primary unit. Each of the above, it is noted, is related, directly or indirectly, to student numbers. Four methods of determining the value of the primary unit described are: the Teacher Training and Experience Factor, the Program or Grade-Level Approach, Cost Reimbursement, and Legislative Grant.

The significance of the share of state and local support in a declining enrolment situation is examined, and in conclusion, the report states that fiscal problems caused by declining enrolments will be resolved either by increasing per unit expenditure at a greater rate or by reducing expenditures and thereby reducing salaries, personnel and/or services.

Madison Public Schools. Report of the Task Force on Declining Enrolments. Madison Public Schools, Wisconsin, August, 1975, ERIC CODE: ED 137 902.

The report examines enrolment trends, school building utilization, school size and school cost savings in the Madison, Wisconsin elementary schools. The task force was charged with developing a decision-making process regarding school closure, developing criteria for alternative school uses, and increasing student enrolment in those schools situated in transitional neighbourhoods. The task force recommended that surplus space either be rented or used for community purposes, that the communication among government agencies and ths school board be strengthened, and that the task force conduct surveys to ascertain public opinion and educational needs.

Manitoba Teachers Society. Report of the Task Force on Declining Enrolments, Winnipeg, 1975.

The report focuses attention on the effects of declining enrolments in Manitoba on the quality of education, the working conditions of teachers and educational finance. The potential impact of declining enrolments is examined under the heading of School Organization: Class size, Multi-grade or Multi-course situations, Reduction in staff and program, Individualism, and Quality of School life. The effect of declining enrolments on teacher morale is examined, and solutions for the stress set up suggested.

In examining educational finance, the report states that if programs are to be maintained, then the costs per student will generally have to increase because the services are the same and cost more in a period of inflation and because there are fewer students.

In offering alternatives or interim solutions, the Teachers Society suggests eleven alternatives:

1. Improved services and programs.
2. Staff retraining programs.
3. Consolidation of schools.
4. Consolidation of school divisions.
5. Co-operating between schools and school divisions.

6. Semestering and Trimestering.
7. Mobile classrooms.
8. Boarding students in other communities.
9. Boarding Schools.
10. Open-campus schools.
11. Educational T.V., Computer-Assisted Education.

The Report is not intended as a cookbook to deal with declining enrolments, but rather an attempt to raise a number of issues which may be pertinent and should be considered in the making of decisions - particularly at the local level.

Mawson, K. Savings Accruing to North York as a Result of the Closing of Schools.
Report No. 13, Part II, Office of the Director of Education, North York, 1975.

A Report prepared to illustrate the system changes and financial benefits accruing from the closing of Hardinton P.S.

Meier, Gretl and others. "Job Sharing in the Schools." New Ways to Work. Palo Alto, California, February, 1976.

The booklet outlines an approach to the need to infuse new life into an educational system that is experiencing retrenchment. Job sharing is seen as a concept closer to team teaching than part-time employment. It is an approach that offers an opportunity to make positions available to new teachers, the possibility of financial saving, enriches the student experience, and the opportunity for career-long teachers to lighten their load.

Job sharing is defined as "a form of flexibility, differing from traditional part-time work, whereby two people share responsibility for one full-time position. Each person has a permanent, part-time job with salary and fringe benefits pro-rated according to hours worked."

The booklet reports on 44 individuals in nine districts almost all of whom were teachers who had previously taught fulltime and wished to work fewer hours. In a very few cases, sharers were new teachers who could enter the school system only by job sharing for a period of time.

Case studies are provided, including a single parent, an older teacher, a teacher who was involved in furthering her education, a new teacher who could get no full-time position, the mother of young children, and non-teaching personnel. The report emphasizes that in order for the sharing to be successful careful planning to ensure compatibility and co-ordination is necessary.

Molloy, Larry. Community/School: Sharing the Space and the Action. Educational Facilities Laboratories, New York, 1973.

In a time of declining enrolments and excess space school boards face the problem of what to do with the excess space and how to attract new clientele. Community/Schools offer one approach. The author observes that "school districts cannot afford to operate buildings for less than one-third (7 to 8 hours) of the day for half of the year (180 days) of the year, while serving about one fifth (46 million) of the population." The book details the procedures that will enable school districts to initiate and develop their own community/schools. It discusses financing, planning, building and staffing and operating facilities that are shared by schools, health services, parks and recreation, day care centres, senior citizens services, and legal aid. Three specific examples are illustrated: The J.F. Kennedy Centre in Atlanta opened in 1971; the Whitmer Human Resources Centre in Pontiac, Michigan; and the Thomas Jefferson High School and Community Centre in Arlington, Virginia.

Minnesota Association of School Administrators and others. Planning For Declining Enrolments; Planning Assistance Manual and Case Studies, Minnesota, 1976, ERIC CODE: ED 128 918-924.

This article consists of a planning manual and five case studies prepared for school superintendents and school boards. It focuses on the need to project enrolments and budgets, analyse staff and facilities, balance revenues and expenditures, the process of closing schools, community involvement and referendums. The basic problem is seen clearly as financial and school boards will be faced with the task of cutting budgets, reducing staff, closing schools, and cutting programs. The manual is intended as an overview of the planning steps. Two techniques for budget projection are outlined, aimed at allowing the school system to detect future budget surpluses and deficits at an early stage as part of the planning process. A short technique involving the application of one rate of inflation to an estimate of per pupil receipts and expenditures is outlined, while a longer method of detailing expenditures by items and applying different rates of inflation to them is mentioned but not worked through. Balancing budgets in a time of retrenchment involves developing and generating alternative cost-saving plans. Reductions in program are not usually accepted until attempts to raise funds by Levy Referendum have failed. The report outlines areas in which different districts have made reductions and points out that large savings are only likely to be made in areas of increasing class-size and closing schools. Strategies for closing a school are outlined, and five case studies of different types of school districts are described.

Mueller, V. "The Educational Setting and Fluctuating School Enrolments." Paper presented at the Annual Meeting of the American Educational Research Association, New York, April, 1977.

The focus of the paper is on the examination of the processes, elements and attitudes required to meet educational policy needs in conditions of declining enrolments. Public education is going through a period of change that is derived from forces in the larger society, rather than forces within the educational system. Educators must become involved in the politics of educational policy making and in the broader activities of state government if effective planning is to take place.

Odden, Allan, and others. The Fiscal Impact of Declining Enrolments: A Study of Declining Enrolments in Four States - Michigan, Missouri, South Dakota and Washington. December, 1976, ERIC CODE: ED 138 591.

This booklet investigates the fiscal impacts of declining enrolments from the viewpoint of state level policy makers. Five aspects of declining enrolments are examined. First, the magnitude of the problem both state-wide and on a school district basis. Second, the type of school district affected by declining enrolments - central city, suburban, rural, large or small with respect to student numbers. Third, the wealth, tax rate, and state aid characteristics of declining enrolment districts. Fourth, the impact of declining enrolments on school district expenditure. Fifth, the relationship between declining enrolments and the minority composition of school districts.

A similar study was conducted in Iowa in 1976 and references to the Oiwa study are made throughout. In conclusion, the implications of this study for new state policies are discussed. Detailed data on enrolment decline issues for the states studies are found in the appendices.

Ottawa Board of Education. Report #77-15 From the Superintendents of Schools to the Small Schools Committee, Ottawa, 1977.

The purpose of the Small Schools Committee was to define "small schools" and to provide adaptive procedures to be applied to relieve problems related to size. Where these measures were insufficient, the schools were identified as needing further detailed study. The Committee decided that any school with enrolments below 200 was to be considered small, and where enrolments were below 90 they were to be examined with a view to reorganization or closure in line with existing procedures. In the report a cost model is defined, detailed costs for identified schools outlined and summarized as costs per pupil. These are then compared to the average cost per student for the entire Board. Findings indicated that the average cost per elementary pupil in the Ottawa Board of Education was approximately $1,650, while in 18 small schools considered it was some $400 or 25% higher per pupil, using 1976 actual expenditures and the 1977 teachers salary scale. Potential costs and savings were calculated for schools considered for closing and their findings presented in a series of tables as an appendix.

Report of the Minister's Advisory Committee on School Finance,
Alberta, 1975.

In examining the question of small schools and small jurisdictions the report suggested a revision of the Alberta small school grant. The allocation of additional funds to small schools to meet higher costs of operation was considered sound, but the way in which it had been done in the past was considered inadequate. Two categories of small schools were defined in terms of pupils per grade as follows:

	Category 1	Category 2
Elementary	0 - 9.99	10 - 20
Junior High	0 -14.99	15 - 30
Senior High	0 -24.99	25 - 50

The proposed grant was to be made up of a flat grant plus a per pupil amount inversely related to the size of the school.

In addition it was recognized that small jurisdictions had to face high operating costs and that this extra cost should be borne through the grant schedule and not through local taxes.

In considering declining enrolments the committee recognized that the larger the decline the larger the impact on fiscal policies.

It stated that studies indicate school jurisdictions can adjust their expenditures by 0.65 - 0.75% for every 1% drop in enrolments, and, based on this, recommended that the amount of funding per lost student fall within the range of 25 - 35% of the basic SFPF grant.

Rideout, E. Brock, and others. Meeting Problems of Declining Enrolment, Ontario Ministry of Education, Toronto, 1975.

The Report looks at the Educational, Social and Financial Implications to School Boards of Declining Enrolments, which became a reality in Metro Toronto for the first time in 1973 when total enrolments dropped from 397,449 in 1972 to 388,254.

After outlining the demographic background to enrolment decline in Ontario the report outlines a series of nine case studies illustrating situations where a board had attempted to close a school. The Report finds that the case studies indicate the necessity of (i) keeping the local community informed concerning the problems of declining enrolments, (ii) involving them in proposing solutions, and (iii) having an approved plan for the use of the school building to be closed.

In suggesting guidelines for school closure decisions, the report stresses the need for long-term planning based on enrolment, costs, staffing, facilities and program information. A school-by-school breakdown of costs, both current and future is suggested. Detailed information on fixed and variable costs may include staff salaries, plant maintenance and operating costs, required alteration costs or renovation costs, costs of supplies and equipment, and transportation costs (if relevant).

The Report emphasizes the need for boards to establish general policy guidelines and outlines review procedures for dealing with specific situations.

The Report includes a review of selected references and a bibliography.

Rideout, E. Brock, and others. Educational, Social, and Financial Implications to School Boards of Declining Enrolments. Ontario Ministry of Education, Toronto, 1977.

This is the report of four separate research studies: (1) a review of the literature on small high schools; (2) a professional opinion survey as to the minimum satisfactory size of an elementary school and of remedial actions for use in small-school situations; (3) a study of the relationships between school size and cost per pupil; and (4) a study of alternative day-time use of vacant school space.

The school-size study confirmed that small schools cost more to operate than larger ones, but it showed that, in Ontario, serious increases in cost (15% above average) occur only when schools fall below 200 pupils or 20 pupils per grade. Percentage wise, the most serious contributors to increased cost are secretarial, custodial and administrative salaries, closely followed by maintenance and operation costs. Boards appear to be more successful in maintaining board-wide staff/student ratios for teaching than for other personnel in small schools. Unit costs become very high when school size falls below 100 pupils.

Sargent, Cyril G. Fewer Pupils/Surplus Space. A Report from Educational Facilities Laboratories, New York, 1974.

The Report traces the school population of the USA from 1950 through the early years of growth until 1969/70 when both kindergarten and first grade enrolments started systematic declines. The author probes the demographic background to the decline examining the present "cross-rip" of declining fertility rates and the number of women of childbearing age that remains high. The author points out the difficulties of long-term population projections beyond those children already born. In looking at the process of closing a school due to declining enrolments the author emphasizes the need for careful planning and describes some of the resources available to the school district to help its planning process.

Times Educational Supplement. "Learning to Live with the Baby Slump." *Times Educational Supplement*, March 12, 1976, p. 1.
The declining birth rate which has affected Britain since 1964 has already had a traumatic effect on the reorganization of teacher education. The school population will not again equal the 1977 figure till the 1990's. The 1986 projected enrolments will be 14% below the 1977 figures. The question is posed, "How far should initial teacher training reflect this decline?" To continue at present rates is likely to be financially unacceptable. The result has been to considerably curtail the annual intake of students into teacher training, to introduce a policy of early retirement which is really an expensive compulsory retirement scheme, and to provide the opportunity to upgrade teacher training to genuine professional status.

Toronto - The Chairwomen's Community Planning Group on the Parallel Use of Vacant Educational Space. *A Reaction to the Report of The Ministerial Commission on the Organization and Funding of the Public and Secondary School Systems in Metropolitan Toronto*, City of Toronto, Board of Education.
A brief directed to the issue of the planning for a disposing of vacant education space within Metro Toronto. Based on the assumptions that there is strong support for the maximum usage of any publicly financed buildings, that the school is an important institution in the maintenance of neighbourhood, that busing is not a viable proposition, and that schools should be kept for educational and community purposes. The brief suggests the establishment of "Parallel Use Committees," a community based planning body made up of school personnel, parent groups, resident and ratepayers groups and community service groups, local businesses and institutions, in all schools that have three or more vacant classrooms.

B. Journal Articles

Broker, G.L. and Hawley, D. "Declining School Enrolments." Saskatchewan Administration, October 8, 1974, pp. 13-16.

In examining the implications of declining enrolments on the school district the article looks at school closures and increased centralization, the opportunities for savings in maintenance and upkeep through closure, the use of empty classes to offer a better program, and the financial implications of such actions. It also examines program and service cutbacks, staff reductions, teacher load, supportive staff reductions, and busing.

At the individual school level, the article looks at the questions of staff morale, program organization, and the use of specialist teachers in non-specialist areas. Inadequate or inappropriate facilities are considered and the additional demands placed on staff as the result of enrolment declines.

Brown, Oliver, S. and Hollander, N.F. "All Kinds of Ways to Cut Costs in Your School District." American School Board Journal, 159 (11), May, 1972, pp. 17-22.

School budget reductions require a systematic approach. The school board is advised to organize, identify alternatives, determine alternatives for cost reduction, have school authorities report possible results of each alternative, to select reductions and implement them. School personnel should be given broad categories where costs can be cut, and the flexibility to make reductions. In the final analysis the board officially accepts responsibility for the reduction of the school budget. 50 ways to cut costs are listed under the headings: "What to do," "How you'll save," and "What you may have to face." Suggestions concerning budget reductions and teacher absenteeism, reducing an already lean budget, unpaid volunteers, and the use of private donations are provided in four "trailer" articles.

Dawson, D.A. and Dancey, K.J. "Economic of Scale in the Ontario Public School Sector." *Alberta Journal of Educational Research*, 20 (2), June, 1974, pp. 184-197.

In this empirical research program carried out for the Ontario Ministry of Education, no continuing economies of scale were found in the public and secondary schools of Ontario. The results of this study indicated economies of scale at the board level for secondary schools up to a size of 4,000 students, but similar relationships were not found at the elementary level.

Eisenberger, Katherine E. "New Population Trends Changing America." *The School Administrator*, AASA. Vol. 34, No. 7, July/August, 1977.

In this article the author looks at the implications for American society of being an aging society - one in which the average age of the population is increasing. She points out that for the first time in American history there will soon be more people over 55 than there will be children of school age. These developments have widespread implications outside of education and the author points to some of the adjustments that industry has made to these changes: the diversification of the baby product industry and of those industries such as Levi jeans that catered to a teenager market.

The "baby boom" of the later '40's and '50's has been followed by a "baby bust." The possibility of the baby boom creating an "echo" as those babies reach child bearing age is examined and the author concludes that any "echo" is likely to be small.

In the face of this changing structure of society education is likely to be hard pushed to maintain its position of high priority as it loses its constituencies, and other issues compete with it for financial resources. The author concludes that what education is facing is not just decline but neglect, and that the most critical issue facing school leaders today is maintaining education as a national priority.

Eisenberger, Katherine E. "Enrolments Down - Budgets Up: A Closer Look." Lutheran Education, 1975.

A public that has been led to believe that larger enrolments means larger budgets will need to be disabused of the idea that smaller enrolments will mean smaller budgets. Failure to convince the public will lead to declining educational quality, distrust of educators, and discord in the profession. That lower enrolments equal lower budgets is a myth. It is understood to be a myth by school administrators - but not by taxpayers.

In order to cope with the new situation the author suggests some solutions involving advanced planning, improved communications, and community involvement. The author also looks at the special problems facing urban areas and suggests that the community school in which the school joins with other social services has particular relevance in this situation.

Goettel, Robert J. and Firestone, R.E. "Declining Enrolments and State Aid: Another Equity and Efficiency Problem." Journal of Education Finance. 1:2, Fall, 1975, pp. 205-216.

Major issues addressed in this paper include: the nature of the declining enrolment problem, state aid problems, types of district most affected, changing enrolment mixes, the teachers' salary dilemma, and fixed costs. Declining enrolments are equated with reduced state aid. For the vast majority of states with equalizing formulas, local districts are affected on the capacity of state aid calculations as well as the distribution side. A greater-than-average pupil decline means a greater than average increase in the local tax base per pupil, other factors being constant. The author argues that state aid should take into account the size and length of enrolment declines as well as special circumstances pertaining to that district. The advantages of different student-based adjustments to school aid formulas are examined, as well as the use of staff-based formulas to allocate general aid, a practice used in several southern states. In addition, the need is emphasized for continued efforts by the state to: (i) aid districts to the full excess costs of Vocational and Special Education and (ii) help urban districts through municipal overburden type adjustments.

Hentschke, Guilbert. "Assessing the Impact of Enrolment Decline on Operating Costs." Educational Economics, May/June, 1977.

The article outlines a model designed to incorporate the major factors affecting school districts' operating costs to help educational administrators in a time of declining enrolments. It is suggested that it would be useful in three ways: for administrators who have to explain why costs are rising at a time when enrolments are falling, for negotiators to indicate the impact of alternative settlements, and as a method of testing out administrative recommendations as to the fiscal effects of proposed new expenditures.

Comparing the model to a recipe, the author lists the ingredients as:

1. Cost-volume relationships for major items of expenditure.
2. Enrolment projects.
3. Projected cost changes for groups of items due to inflation and contract agreements.
4. Estimated changes in non-local revenues.
5. Estimated changes in local property valuation.

Steps used in developing the model are:

1. Determine short run fixed and variable cost elements.
2. Construct the short run cost relationships that will face the district over the next several years.
3. Incorporate estimates of changes in expenditures due to inflation and contract agreements.
4. Estimate the impact of changes in non-property tax revenue.
5. Estimate necessary changes in property tax revenues and rates.
6. Adjust as necessary.

The model provides no optimum answers. It does provide a simple, useful method for integrating a wide variety of cost related phenomena.

James, Thomas. "Diagnosis and Treatment for Ailing School Finance Systems." Planning and Changing 2 (4), January, 1972, pp. 174-180.

The author reviews his contention that local-property-tax-paying ability was the major determinant of social policy for public education and that the equation must be reversed so that society instead would determine what should be spent for education. Now that the courts have diagnosed this pervasive ailment in America's state finance systems, the legislative remedies are beginning to emerge. James points to the fiscal neutrality principle contained in the Serrano line of decisions (that a state denies pupils equal protection under the law when substantial disparities exist among school districts in the amount of revenue available for each child's education). Almost certainly the legislative remedy to satisfy the principles of fiscal neutrality will, in many instances, emerge as full state funding for public elementary and secondary education. The author summarizes with the contention that the most cogent argument for full state funding is the flexibility that it would give the legislature in assuring a politically satisfactory balance in the equitable treatment of taxpayers. The most serious objection to full state funding is the probability that funds would be distributed on a flat grant basis which would not improve the equality of educational opportunity.

Jordan, K.F. and Hanes, C.E. "Financing Education in an Era of Limit." Phi Delta Kappan, Vol. 57, No. 10, June, 1976, pp. 677-678.

An era of growth and development has been followed by retrenchment and austerity. School financing is suffering from inflation and state legislation designed for a period of growth. Education has to be considered in competition with other pressures on the limited state budget. This is a period in which there is a decline in public support for education and the taxpayer is "in the driver's seat." The present situation represents a challenge for those interested in assuring adequate funds for public education, and requires the recognition and understanding of the basic demographic facts: the decline in the numbers of young people and a new attitude to spending in education. The author concludes that "Quite possibly ... we may be in the first stage of a long twilight in education - an evening twilight, not a morning twilight."

Keough, W.F. and others. "The Spectre of Declining Enrolments: What It Means and How to Manage It." The American School Board Journal, June, 1975, pp. 40-42.

The report contains advice on how to plan for the future in the face of receding student populations; how to handle conditions and reactions in the community; and what to do with partially filled or empty schools. It suggests that it is up to the school policy makers and administrators, after reading its recommendations, to put a few or many of them into action.

The author suggests that the administrators' first response should be to look to the opportunities for providing a better service presented by declining enrolments. When reduction in services is unavoidable, the author offers suggestions to deal with reduction in force, and to ensure community involvement in the decision-making processes.

Katherine Eisenberger outlines ways to prepare the public for the closing of neighbourhood schools where this is considered essential, and Pack and Weiss make some suggestions on how to make best use of vacant space.

Lauwery, Joseph. "Urgent Problems Facing School Administrators." Education Canada, 12, June, 1972.

The educational boom is over, the climate has changed and new needs are being felt. Administrators must now carefully invest the resources rationed to them and be clever forecasters of the "weather ahead." The author deals here with mapping out a general strategy that fits the future rather than dealing with short-term tactics.

Education has passed from "euphoric boom" based on the baby boom, the belief in the value of education, and the explosion in knowledge, to a period of "melancholy depression."

Planning is of very great importance, and nowhere more so than in the recruitment of teachers. It is important that they are appropriately qualified not just for the present, but for the next 5, 10 or 15 years, in line with an overall development plan.

Planning is needed at the provincial and local level and co-ordination between the two levels is needed.

Lucas, J.T. "Coping with Declining Enrolments." School Business Affairs, July, 1977.

The 1970's have seen an important shift in education and people's attitudes towards education. In the 1950's and 1960's general public feeling towards education was positive despite an enormous growth in costs. In the 1970's declines in numbers have not brought declines in costs. Instead, costs continue to increase rapidly, and public feeling has altered with tax-payers finding it difficult to accept continued rises in costs along with declines in enrolments. The article includes a chart of the percentage enrolment changes for 1971-76 in the 50 largest school systems in the USA.

Neill, George. "Washington Report: High Schools Enter a New Era of Declining Enrolments." Phi Delta Kappan, October, 1977, p. 138.

America's second major reversal of enrolment trends in the 1970's is just beginning. The National Center of Educational Statistics

(NCES) reports enrolments this year in grades 9 - 12 will start to decline, and this decline will continue until at least 1986. High school enrolments will decline from a peak in 1975 of 15.7m to 13.3m in 1985, a decline of some 15%.

In looking at what has happened to staff the NCES projects that the number of classroom teachers will not decline in the same manner, but that pupil/teacher ratios will decline to 19.4:1 in 1985, and that this, along with an increase in elementary teachers after 1981, will offset some of the decline. However, in the 1980's the decline will be too large to be completely offset and in 1985 the demand for teachers in public secondary schools is expected to be 889,000 - 130,000 fewer than in 1975.

Projections for finance over the same period indicate that the total cost for all regular and private elementary and secondary schools will jump from $75 billion in 1975/6 to $101.4 billion in 1985/6 (at 1975/6 dollars to eliminate inflation). This increase in costs at a time of declining enrolments will provide educational leaders with a critical public relations problem.

Richards, Carol R. Non-Public Schools Experience Mini-Boom. School Business Affairs. Vol. 44, No. 1, January, 1978, pp. 17-18.

Private prep schools are discreetly booming in the USA, Catholic school shrinkage is stopping, and other denominational elementary schools show modest signs of growth, according to the author. What is shrinking is PUBLIC school enrolments.

Reasons offered for this situation relate to a dissatisfaction with the public school system. Parents want their children to go "back to the basics," meaning not only the 3 R's but also developing a sense of discipline, morality, honor and diligence.

The paper serves to emphasize that public schools have a public relations problem in these times of declining enrolments, and that reducing programs in the face of financial restraint may serve to increase the number of students moving out of the public school system.

Shalala, Donna E. and Williams, Mary F. "Political Perspectives on Efforts to Reform School Finance." Policy Studies Journal, 4 (4), Summer, 1976, pp. 367-375.

Recent efforts to revise the way in which public schools are financed are part of a larger debate in American politics about the merits of centralization and decentralization. A central issue is which level of government will bear primary responsibility for funding education. Past and present roles of all three levels - federal, state and local - are discussed. Factors leading to the centralization of responsibility at the state level are examined. Attempts to change the school aid formulas in individual states are examined. State education departments generally have not played major roles in the latest attempts to alter funding and efforts to use the initiative process, bypassing the legislation on this issue, have been unsuccessful.

Thomas, M. Douglas. Declining School Enrolments. School Business Affairs, Vol. 44, No. 1, January, 1978, pp. 6-8.

Based on the US Office of Education's projections of a decline in enrolment in public school from 45.5 million in 1973 to 41.0 million in 1983, the author outlines a plan and process for administrators faced with declining enrolments.

The paper covers identified problem areas, and offers lists of potential solutions and approaches. The author emphasizes the importance of community involvement and support in dealing with the problems of enrolment decline. Five "bread and butter" issues are identified: staff reductions, surplus space, financial restraint, transportation, and support for Board of Education decisions. Ways in which financial savings might be obtained include staffing at mid-year enrolments, holding to staffing ratios, renting surplus space, early retirement, decentralizing budget accounts, and developing a review of new program procedures.

The author stresses the importance of the administration being able to implement quickly decisions made by the Board of Education and suggests ways that this can be done. In addition he looks at additional services that may be required to deal with students and parents relocated by school consolidation, and stresses the importtant of giving attention to the opportunity to improve educational services.

Whitlock, James W. "Emerging Role of the State Education Agency Defined." School Business Affairs, 38 (2), February, 1972, pp. 37-39.

The present crisis in education may be relieved by planning and evaluation. Sound decisions based on educational data are needed. State educational agencies must develop systems that can provide the desired information. Data, accounts and terminology must be standardized through the development of handbooks. To improve the efficiency of use, educational data must be organized and put into machines. The state educational agency must provide leadership in planning and evaluation of educational systems.

C. Unpublished Doctoral Dissertations

Burgner, Gary A. The Perceived Effects of Declining Enrolment on Selected Unified School Districts in Los Angeles County. Unpublished doct. diss., University of Southern California, 1977.

The purpose of this study was to determine the perceived effects of declining enrolments in unified school districts in Los Angeles County and to determine what procedures could be devised and followed to either avoid or minimize any difficulties inherent in such situations.

Information was obtained by the use of a questionnaire administered to the superintendent in ten unified districts which has experienced an enrolment decline of 10% or more between the years 1971-1975.

The study considered the following aspects of declining enrolments: (1) What have been the problems created by declining enrolments in the following areas: Enrolment Projections, Finances, Personnel, Physical Plant, Instructional Programs, and Determining and Communicating priorities? (2) How did these problems manifest themselves? (3) What approaches were used to minimize the difficulties resulting from these problems? (4) How effective were the approaches? (5) How might the problems be handled if the problems were faced again? (6) What are the major pitfalls to be avoided? (7) What future problems are foreseen?

Chapdelaine, Leo G. Public Opinion Towards Education: Declining Enrolment and a Shifting Economy. Unpublished doct. Diss., Columbia University Teachers College, 1977.

The purpose of this study was to conduct a survey of public opinion regarding educational goals and outcomes in a school district experiencing declining enrolments and financial difficulties.

The study found that respondents had high expectations about the education that children should receive. However, they were troubled over their ability to support these expectations financially. People said that services should be cut. Citizens were reluctant, however, to see this happen with regard to programs. Cutting of administrative positions and holding down salaries for all personnel was clearly a desirable form of action. There was a clear advocacy of a "return to basics" and an interest in increasing offerings in vocationally related subjects. Respondents perceived a marked lack of emphasis on citizenship and on the teaching of values. Second to financial concerns, standards of discipline was the most highly recognized problem.

Most people saw declining enrolments as an opportunity to save money. They favoured cutting staff proportionally and were willing to close neighbourhood schools.

Thomas, D. Declining Enrolments: A People Problem. (Effective Strategies for Reducing Staff), 1977, ERIC CODE: ED 136 375. Declining enrolments almost inevitably mean reduction in force. The author maintains that this need not be as traumatic as some think. He suggests basing teacher personnel needs on mid-year projects, since numbers always decline as the year progresses. Strategies for staff reduction suggested include: early retirement plans, aggressive procedures for termination of teachers who cannot provide satisfactory service, work with neighbouring districts if they are experiencing growth, development of a trained corps of substitute teachers, encouraging everyone in the district to become aggressive in obtaining money from government and private sources, and training secondary teachers for elementary school positions.

Treasure, J. (Chairman). Interim Report of the Special Committee to Investigate Declining Enrolments, North York School Board.

North York has experienced widespread declines in enrolments during the 1970's. These declines have resulted from declines in the birthrate, reduced immigration, and in some areas, a significant loss of students to the separate school board. Focussing on four elementary schools where decline is seen as being most urgent, the report, in concentrating on losses to separate schools which it sees as being more within the influence of the school board, suggests that the most effective means of retaining and attracting students would be to provide within each school the facilities, services and programs which meet the educational and social needs of its particular community.

In order to do this, the Report suggests the establishment of a pilot program in a school which is experiencing decline due to other than demographic reasons. A community-school worker would be employed to cooperate with school, community, and local agencies, to provide such facilities as day-care, before and after school programs, adult classes for new Canadians, and extra curriculum catechism classes where they are seen as necessary. The community worker would be required to be fluent in the predominant (non-English) language of the community.

Truesdell, Wayne P. "The Impact of Declining Enrolments on School Finance." Paper prepared for the American Education Finance Conference, San Antonio, Texas, March, 1977.

The paper examines the impact of declining enrolments on school finances in Oiwa State. From a high point in Public School enrolments in 1969/70 the state has experienced a significant drop in enrolments that is likely to exceed 25% by 1988, when enrolments are predicted to be at their lowest. This decline would produce, based on a 25:1 pupil/teacher ratio, a need for 6,986 fewer rooms and teachers.

In order to reduce the impact of these declines the state legislature has adjusted the state funding formula with the introduction of the "phantom student." Schools with declining enrolments are permitted to use the January 1977 enrolment figures for the 1977/78 budget rather than the September 1977 figure. To this may be added 50% of the difference between the January 1976 and January 1977 headcount, although above a 5% drop only 25% can be counted. The result of this legislation is that 11,740 non-existent students have been used to calculate state funding to districts with declining enrolments.

The author suggests that this in itself is not a solution to the problem and offers the following approaches: continue to base budget growth on a cost factor which considers the increase in state funds and in consumer prices; turn the fiscal decision of school budgets back to the local community; segregate fixed costs from budget operating under a growth factor, and let boards put all of the increases into the next year's budget; take transportation out of the regular budget and allow state aid above a defined per pupil cost; let the local community decide if it wants to levy additional taxes.

Zusman, A. and Weiner, S. Operational Incentives and the Growth of Competition in the Education Sector, National Institute of Education, February, 1977.

The article looks at attempts by educational institutions to recruit "non-traditional" students, especially adults, to offset declining enrolments and possible staff layoffs. It involves a case study of a Californian context. As educational institutions compete for this new clientele, the authors predict that there will be conflict between different educational agencies, and that this will be most marked between the High School and the Community College. The article raises five key questions: "Do high schools and community colleges compete for the same adult clientele?"; "Does this lead to duplication and inefficiency?"; "What major influences affect the development of competition over adult education?"; "Does competition affect who is served, and the type of programs offered?"; and "Should the state respond to indications of increased competition, conflict or duplication?" The study examines three different areas in which the situations are described as: (a) "Open Warfare over adult education," (b) Shifting positions over adult education, and (c) Living within largely self-imposed limits. In its conclusions the report finds that the Californian legislature has responded to conflict in this area as a sign of unnecessary duplication, while this report does not support this relationship. Rather, conflict is seen to arise from anticipated attempts by one institution to infringe on another's "turf." Conflict levels are seen as a poor indicator of overlap. The study finds no evidence to support the contention that competition has led to increased creativity and to educational institutions reaching out to service new populations.